

# American Fruits

International Trade Journal  
of Commercial Horticulture

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Circulating Throughout United States, Canada and Abroad  
Featuring Commercial Horticulture in all its Phases of  
Nursery Stock, Orchard, Landscape Planting, Distribution  
Published Monthly by American Fruits Publishing Co., Inc.

Vol. XXII

ROCHESTER, N. Y., DECEMBER, 1915

Number 6

## PAINESVILLE NURSERIES



### DURING DECEMBER

The only touch of color in our Northern landscapes will be furnished by the greens and blues of evergreens; and the persisting scarlet fruits of shrubs. While such things are dominant in view, it is well to consider them in relation to next year's sales.

Did you notice the unusual abundance and brilliancy of the berries this fall? Many of your customers noted and appreciated them, and will be asking for these shrubs in the spring.

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1854

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# American Fruits Directory of Organizations

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**American Association for Advancement of Science**—L. O. Howard, Smithsonian Institute, Washington, D. C.  
**American Association of Park Superintendents**—J. J. Levison, Brooklyn, N. Y.  
**American Genetic Association**—G. M. Rommel, Washington, D. C.  
**American Pomological Society**—Prof. E. R. Lake, 2833 Park Road, Washington, D. C.  
**American Society of Landscape Architects**—Ailing S. DeForest, Rochester, N. Y.  
**American Rose Society**—Benjamin Hammond, Beacon, N. Y.  
**American Seed Trade Association**—C. E. Kendel, Cleveland, O.  
**Apple Advertisers of America**—U. Grant Borden, Baltimore, Md.  
**British Horticultural Trades Association**—Charles E. Pearson, Lowdham, Notts, England.  
**Canadian Horticultural Association**—Julius Luck, Montreal.  
**Eastern Fruit Growers' Association**—T. B. Symons, College Park, Md.  
**International Apple Shippers' Association**—R. G. Phillips, Rochester, N. Y.  
**Mississippi Valley Apple Growers' Society**—James Handly, Quincy, Ill.  
**Missouri Valley Horticultural Society**—A. V. Wilson, Kansas City, Mo.  
**National Council of Horticulture**—H. C. Irish, 4266 Castleman Ave., St. Louis, Mo.  
**National Horticultural Congress**—Freeman L. Reed, Council Bluffs, Ia.  
**National Nut Growers' Association**—J. B. Wight, Cairo, Ga.  
**Northern Nut Growers' Association**—Dr. W. C. Deming, Georgetown, Conn.  
**Ontario Fruit Growers' Association**—P. W. Hodgetts, Toronto, Canada.  
**Ornamental Growers' Association**—C. J. Malloy, Rochester, N. Y.  
**Peninsula Horticultural Society**—Wesley Webb, Dover, Del.  
**Royal Horticultural Society**—Rev. W. Wilks, Vincent Sq., London, S. W., England.  
**Railway Gardening Association**—W. F. Hutchison, Sewickley, Pa.  
**Society for Horticultural Science**—C. P. Close, Washington, D. C.  
**Society of American Florists and Ornamental Horticulturists**—John Young, New York.  
**Union Horticulture Professionnelle Internationale**—C. Van Lennep, The Hague, Holland.

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**Program**—Lloyd C. Stark, Louisiana, Mo.  
**Exhibits**—Albert F. Meehan, Dresher, Pa.  
**Editing Report**—John Hall, Rochester, N. Y.  
**Finance**—John H. Dayton, John Watson, Theodore J. Smith.  
**Publicity**—J. R. Mayhew, Lloyd C. Stark.  
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**Tariff**—Irving Rouse, Rochester, N. Y.  
**Root Gail**—E. A. Smith, Lake City, Minn.  
**Transportation**—Charles Sizemore, Louisiana, Missouri.

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**American Retail Nurserymen's Protective Association**—President, H. W. Marshall, Arlington, Neb.; Secretary, Guy A. Bryant, Princeton, Ill. Meets annually in June.  
**Association of Oklahoma Nurserymen**—President, P. A. Vought, Holdenville, Okla.; Secretary, Jim Parker, Tecumseh, Okla.  
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**Northern Nurserymen's Association**—Secretary E. A. Smith, Lake City, Minn.

**Ohio Nurserymen's Association**—President, W. N. Scarff, New Carlisle; Secretary, W. B. Cole, Painesville, O.

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## AMERICAN FRUITS MAGAZINE---December, 1915

**EDITORIAL DEPARTMENT**—Communications on any subject connected with Commercial Horticulture, Nurseries or Arboriculture are cordially invited by the Editor; also articles on these subjects and papers prepared for conventions of Nursery or Horticultural associations. We also shall be pleased to reproduce photographs relating to these topics, Orchard Scenes, Cold Storage Houses, Office Buildings, Fields of Stock, Specimen Trees and Plants, Portraits of Individuals, etc. All photographs will be returned promptly.

**ADVERTISING**—First advertising forms close on the 20th of each month; last advertising forms on the 22d. If proofs are wanted, copy should be on hand on the 15th. Advertising rate is \$1.40 per column-width inch.

"AMERICAN FRUITS" is distinctive in that it reaches an exceptional list and covers the field of the business man engaged in Commercial Horticulture—the carlot operator. Here is concentrated class circulation of high character—the Trade Journal of Commercial Horticulture, quality rather than quantity.

"AMERICAN FRUITS" will not accept advertisements that do not represent reliable concerns.

**SUBSCRIPTIONS**—"AMERICAN FRUITS" will be sent to any address in the United States for \$1.50 a year; to Canada or abroad for \$2.00 a year. Add ten cents unless bank draft, postal or express money order is used.

**WHAT THIS MAGAZINE STANDS FOR**—Clean chronicling of commercial news of the Orchard, Field and Nursery. An honest, fearless policy in harmony with the growing ethics of modern business methods.

Co-operation rather than competition and the encouragement of all that makes for the welfare of the trade and of each of its units.

Wholesome, clean-cut, ring true independence.

**INDEPENDENT AND FEARLESS**—"AMERICAN FRUITS" is not the official journal of any organization. It therefore makes no distinction in favor of any. It is untrammelled in its absolutely independent position and is the only publication of the kind.

This Magazine has no connection whatever with a particular enterprise. Absolutely unbiased and independent in all its dealings.

Though it happens that its place of publication is in the eastern section of the country, it is thoroughly National in its character and international in its circulation.

Its news and advertising columns bristle with announcements from every news corner of the Continent.

It represents, as its name implies, the Fruits of American industry in one of the greatest callings—Commercial Horticulture in all its phases of Nursery Stock, Orchard and Landscape Planting and Distribution.

### AMERICAN FRUITS PUBLISHING COMPANY, INC.

Ralph T. Olcott, Editor and Manager.

123-125 Ellwanger & Barry Bldg., Rochester, N. Y.

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# **Apple Seedlings**

Not the ordinary kind, but stocks

- that have been sprayed
- that are grown on new land
- that are thoroughly matured
- that will be graded high

The 1-4 inch and up grade are extra fine

In buying Apple seedlings

- buy a grade that will make No. 1 trees
- buy stocks that are guaranteed to arrive in perfect condition
- get a sample
- buy the best

We grew 173 acres of Apple Seedlings this season

We do not squeeze the grades

## **F. W. Watson & Co.**

Topeka, Kansas

Apple and Pear Seedling Specialists



# American Fruits

## Commercial Horticulture, Nurseries and Arboriculture

Entered August 4, 1904, at Rochester, N. Y., Post Office as second-class mail matter

Vol. XXII

ROCHESTER, N. Y., DECEMBER, 1915

No. 6

**Horticultural Publicity at \$1000 Per Day**—A restaurant keeper in Chicago inserted on Apple Day a full page advertisement in The Chicago Tribune, measuring 17 x 22 inches. The cost must have been at least \$1,000, for the single insertion. That indicates how the apple business has developed. Is there any similar action to show how the nursery business has developed? Here is a text for the Publicity Committee of the American Association of Nurserymen.

**Motor Trucks for Nurseries**—The feasibility of hauling by motor-truck from St. Louis to Alton was well illustrated a few weeks ago when a big auto-truck load of trees was sent up to Mayor Beall of Alton, Ill. The nursery is ten miles south of St. Louis, but the truck was started at 5 a. m. and reached Alton at 9:30 o'clock, just four and a half hours for a trip estimated at 45 miles. The mayor purchased thirty catalpa trees for his farm north of Alton. He also planted a few at his residence in Alton. The use of motor trucks by nurserymen is increasing.

**Who Is To Blame For This?**—C. M. Hobbs, Bridgeport, Ind., last month directed attention to a fault in orchard planting which it would seem is largely due to lack of proper educational work on the part of nurserymen. This well-known Indiana nurseryman said: "From the experience this year as well as in the past it is evident that the average farm orchard contains too many summer and autumn varieties of apples. This season in central and northern Indiana thousands of bushels of apples rotted in the orchard for want of a profitable market. Summer and fall varieties came in competition with vegetables, peaches, plums, cherries and pears; besides varieties of this season are quite perishable and must be marketed at once. The average farm orchard does not afford enough fruit at any one time to justify extensive marketing facilities. The farm orchard in the future should contain fewer summer and fall varieties and more varieties that will ripen later and keep into and through the winter in cold storage, in the ground, or in a cool, damp cellar."

**Apple Industry of Pacific Northwest**—The Pacific Northwest this year produced 13,238,000 boxes of apples as against 14,500,000 boxes in 1914. Three boxes of apples are equal to one barrel. The best authorities place the apple shipments of the present season out of the Pacific Northwest at 6,000 cars, which will average in the neighborhood of \$1.10 per box f. o. b. shipping point—not, however, net to the grower, to whom the price would be about 15 cents per box

less. Apples exported to Europe from this section have been and will be this season very limited in amount. One of the largest fruit associations estimates that up to the present time it has exported only seven cars to Europe. About 1,200 cars are expected to go from this section direct to New York and some 200 cars have passed through Spokane for local and export trade.

**Can It Maintain the Pace?**—Far seeing members of the American Association of Nurserymen took a long stride forward at the Detroit convention in behalf of the American Association of Nurserymen. If the Association is not strong enough to maintain the pace set by the revised constitution, the employment of an attorney to provide the advantages in legislative matters which the florists' and seedsmen's associations enjoy, and the appointment of an arbitration committee, then it is scarcely strong enough to be of the kind of service which the nursery trade in the twentieth century should demand. Organized effort in all trades has broadened out materially in recent years. Can the nursery trade expect to progress on lines laid down for conditions as they were forty years ago?

**An Opportunity Missed**—The Chicago chapter of the Women's National Association last month held an all-day session as part of the programme of the flower show. The American Association of Nurserymen should have been officially represented there under the direction of its Publicity Committee, to urge the best use of ornamental nursery stock.

**Vermont Apples for Europe**—All available sound apples which he can purchase at Isle La Motte, Vermont, are being bought by C. A. Blohm, of the C. A. Blohm Company, Limited, of Trenton, Ontario, and, after being packed on the island, are sent from there to Boston, where they are shipped to Liverpool for the London market. While this is not the first appearance of Vermont apples in Europe, it is the first time that they will appear on the market there under the Vermont name. Previously the apples have been shipped to New York where they were re-packed and sent to Europe under the firm names of New York concerns. But the apples which are being bought up by Mr. Blohm are packed on the premises, and on the head of each barrel is stenciled in large letters, Vermont Apples, packed by C. A. Blohm Company, Limited, at Isle La Motte, Vermont, U. S. A. New York and Boston companies have also bought heavy shipments from the orchards at Isle La Motte. The freight rate has advanced from a little less than one dollar to

from \$1.50 to \$1.75 from Boston to Liverpool. The revenue from the orchards of Vermont grows yearly with the increased care which is given them.

**Auto Trucks To Facilitate Distribution**—Reviewing the Indiana Apple Show and the 1915 crop conditions C. M. Hobbs last month said: "We have demonstrated that by using up-to-date orchard culture we can grow as good crops of as good quality as any grown anywhere. The all-important question now is the profitable distribution of the crop. Even this season, with its immense crop, thousands of people did not get all the apples they wanted or could use. When to the cost of growing is added the expense of picking, the package, freight, commission and retailer's profit the price is more than the masses can afford and they go hungry for more economical method of distributing the crop.

"With the good roads system we will soon have and the auto truck, I can see at least a partial solution of the problem. A truck that will carry 100 bushels or more of apples could make daily trips over given routes miles away from the orchard reaching the towns and country people along the route, selling directly to the consumer and to the dealer at a profit and keeping the price within the reach of the masses. If we are to dispose of all the apples we are to grow in the near future, we must get them to the masses at a price at which they can afford to use all they want.

"The consumption of good fruit is enormous when persons can get all they want. For example, the 600 inmates of the Indiana Boys' School at Plainfield consume annually 5,000 bushels of apples and 'holler' for more."

**Top Layer of Apples**—At the annual meeting of the Indiana Horticultural Society last month Senator H. M. Dunlap, Savoy, Ill., the biggest apple grower in Illinois, said the apples on the top of the barrel should be about 20 per cent. better than the others in the barrel, because the buyer judged from the face of the barrel and if the apples were of better color, good show apples, they got better attention.

"Make your apples smile," he said. "There is no more reason why you should do otherwise than there is that a pretty girl should wear a pair of ugly shoes."

That is directly against the advice which has long been given to the apple grower and packer. Doubtless it is a just rebuke to a fickle public which buys according to sight instead of according to quality. From experience such as Senator Dunlap has had growers have learned to meet the buyer's whims. We believe Senator Dunlap would argue for full value, for the price asked, all the way through the package.

# The Possibilities and Future of Fruit Growing

JAMES G. MOORE, Associate Horticulturist, University of Wisconsin

**M**ANY a man who possesses a young orchard is asking himself, "What does the future hold for the fruit grower?" The answer to such a question must necessarily be a prophecy and as I lay no claims to abilities along that line, I hesitated somewhat in accepting an invitation from your secretary to speak to you on the subject. As I consider the so-called practical subjects to which you have listened and are to listen, I have even greater hesitancy in presenting a subject which by many might be styled "theoretical." The far-famed prophets of old were considered theoretical and yet the prophecies which they pronounced came true because they studied the casual factors of their time and from them reached conclusions which the test of time proved correct. Perhaps then by following their method we may be able to prophesy correctly concerning the possibilities and future of fruit growing.

The fact that the question is raised indicates that there is a possibility that the future of commercial fruit growing may not be so bright as many supposed, two or three years ago, that it would be. The careful observer has noticed for some time past marked indications of a falling off in interest in orchard planting and in the enthusiasm with which the industry is discussed in the popular press. The "signs of the times" have been gradually becoming less favorable to the industry. In order to judge the value of these signs in helping us to reach a conclusion, it is necessary that we study the factors underlying them.

A few years ago there developed in this country a propaganda which came to be known as the "Back to the Soil Movement." Agriculture, which had slowly degenerated in the esteem with which it was held as an occupation in the days of Washington and Jefferson to the rank in which the farmer was known as a "hayseed," suddenly ascended the scale until it became the goal of a multitude who had formerly only considered it in derision. There were many causes contributory to this sudden change, chief of which doubtless was the very clever way in which magazine articles and advertisements portrayed the beauties and profits of farming and covered up the background of hard work and worry. Naturally the man attacked by the "back to the soil" fever was desirous of getting into the most attractive form of agriculture, and fruit growing seemed to be quite largely selected as the line best fulfilling his ideals.

The result is familiar to all. A general scramble of investors to get into the business as quickly as possible ensued and many growers already in the business increased their plantings. This made possible the day of the real estate agent and of inflated prices for fruit lands. Wild schemes were proposed for the development of commercial fruit regions and hundreds if not thousands of acres of land unsuited to fruit culture were planted to fruit. This was particularly true of apples. This boom in fruit growing was most largely felt in the western states, but it is very doubtful if there was a state in the Union which was not affected to a greater or lesser extent.

Advertisements of land agents and often magazine articles written by men unfamiliar with the industry contained many misleading statements as to handsome profits in a few years and the great possibilities

of intercropping in meeting the expense of development. Orchardling was to be made easy. The land company was to do all the work, prepare the land, plant the trees, prune and cultivate, while the orchardist was to wait a few short years and then live in luxury on the returns from his orchard.

This story sounded so good that many of the uninitiated really believed it and eagerly invested in so seemingly attractive a proposition. The acreage devoted to fruit growing increased at an unprecedented rate. The first suggestion of trouble ahead came in the question, "How can the fruit from such large areas be disposed of at profitable prices?" The enthusiasm, however, was too great to be much affected by such a query and the land agent had a ready answer for any who dared ask the question. Plausible arguments sufficed for a time, but at last an unusually large crop put the question so forcibly to the front that it was no longer possible to ignore it and "over production" became one of the most momentous problems which the fruit grower had to face.

The possibility and future of fruit growing depend upon just two main factors, production and consumption. Many other factors are contributory to these, but the final decision rests solely upon them. If we are to prophesy intelligently then concerning the outlook of the fruit grower, we must study closely these two factors. The relative amounts of production and consumption determine whether or not there is "over production."

What do we mean by this term "over production", which most of us use so glibly? I dare venture that were we to call for definitions we would get a rather wide range of answers. For the present I will ask you to accept the following definition. Over production of a commodity is its production in excess of the amount needed for consumption at prices sufficiently high to give profitable returns to the producer and to pay the cost of marketing. Is there an over production of fruit in the United States, or is there likely to be in the future? If there is, then it is evident that the future of fruit growing is not bright. If there is not, then we may expect fruit growing to remain an occupation which will attract a fair proportion of our citizens of an agricultural turn of mind and return to them a just recompense for their labors in their chosen field.

Were I to ask the farmers about my home city if there was over production of fruit or likely to be in the near future, every one would answer yes, for they have been letting their fruit rot on the ground this fall or selling it at about thirty cents per bushel. Their answer could doubtless be the answer of hundreds of other farmers and possibly many commercial fruit growers in various sections of the country. Nevertheless in spite of this fact, I am not ready to admit that there is over production, nor am I ready to admit that there is over production or to take such a verdict as an indication that there is a probability of over production even in the near future. In forming our judgment on this question, we are quite likely to depend too largely on the conditions as we find them existing in our local communities rather than considering them from the standpoint of the country as a whole or even the greater possibility of our relation to the foreign demand.

(To be continued)

## Low Value of Pulled Stock

Prof. Frederick Dunlay, University of Missouri

The low value of "pulled" stock for forest planting is clearly shown by experimental plantings made last spring on the woodlot at the Missouri agriculture experiment station. The station wanted to cover an exposed limestone slope and selected the native red cedar as the tree best suited to the dry, shallow soil. Inquiries addressed to commercial nurserymen brought the answer that no red cedar stock was to be had for forest planting owing to the strong demand for such material as stocks on which to graft ornamental junipers. The station was thus obliged to turn to a dealer in "pulled" stock, this term meaning small trees that have sprung up naturally in the woods. The particular batch of trees purchased had been dug in the Ozarks in the early spring of 1913, planted in nursery rows and carefully cultivated for a year to encourage the replacement of lost roots. The plants came by express without delay and were set in the ground the day following their arrival. The stock was in fair condition, its defects being characteristic; the stems and branches were long and slender, and the roots included a few long branches with short laterals. The foliage was sparse, it being confined to the ends of the branches and yellowish green,

## At the Home of the Navel

A. D. Shamel of Riverside, Cal., in an article in the Orange Judd Farmer, describes his visit to the original home of the navel orange in Bahia, Brazil. He says:

We found a total of about 76,000 navel orange trees at Bahia. The trees are planted at the average rate of about 100 to the acre. The city and state of Bahia are encouraging the planting of navel orange trees, so there is likely to be a considerable increase in the area.

The universal stock used in Bahia for the propagation of the navel orange is the Brazilian sour orange. The seed is sowed in seed beds much like the practice in California nurseries. The seedlings are budded when about two years old, at which age they reach a size of  $\frac{1}{2}$  to 1 inch in diameter. Shield buds are commonly used, cut from bud stocks of about same size as seedlings. These buds are inserted in the seedlings at 10 to 20 inches above the ground, high budding being the rule.

Orange lands with bearing trees convenient to the city are said to sell at \$300 to \$500 per acre. The cost of clearing an acre is estimated at \$2 to \$4. The ant colonies on the cleared land are destroyed by fumigation, using sulphur and arsenic. Navel orange trees are planted during all months of the year, although the spring season is usually preferred. Trees are arranged in squares and are set about 20 feet apart, average planting of about 100 to the acre.

Although oranges, lemons, and grapefruit have always grown on the streets and in nearly every front and back yard in Marysville, Yuba county, Cal., and throughout the foothill districts of the county, their cultivation for commercial purposes has never been undertaken. While in the vicinity of that city several small tracts will be set out during the coming year to orange and lemon trees where no irrigation is needed. In the foothill districts, with the aid of an extensive irrigation system, vast acreages are to be planted to citrus trees. Nurserymen in the vicinity have been rushed with orders for young orange and lemon trees.

"A paper which gives the best value to the reader will give the best value to the advertiser as well. I don't think there is any argument about the soundness of this view."  
—H. Dumont, Chicago, Ill., in Printer's Ink.



# Orchard Reclamation By Modern Methods

J. M. FIELD, Climax, N. C.

**M**Y experiment in orchard reclamation began in the fall of 1911. I had been in possession for some years of a farm on which was an old orchard set during the time of my grandfather. It had practically never received any care or attention, and its condition was ample proof of this fact. The trunks and larger limbs were covered with the scabby, scaly bark of two or three seasons previous growth; the tops contained many dead decaying limbs; the limbs which were alive were crossed and matted, and held a moderate yield of dried-up rotten apples, while the bases of the trunks were encircled by a good crop of sprouts.

As I had plenty of young trees growing vigorously, it would have seemed but the part of wisdom to have destroyed these old ones, but I wished to use them in an experiment to see what could be accomplished in the way of putting new life into them by modern methods. I felt reasonably certain that the judicious use of the pruning knife and preventive spray mixtures above ground and dynamite below would work as great a transformation in those trees as has the surgeon's knife and the physician's pill in the reclamation of the bodies of many men.

## BEGAN WITH DYNAMITE

I began the process by simultaneously exploding four quarter pound charges of 40% dynamite to each tree when soil and sub-soil were dry, each charge being at a depth of 30 inches and at right angles to each other, each charge 10 feet distant from the base of tree, which caused the soil and sub-soil to hold in suspension barrels of moisture, enabling the tiny feeders to secure an abundance of nourishment hitherto inaccessible.

Then I removed all the loose shaggy bark from the trunks and large limbs by scraping with hoe; also the accumulations of leaves in the forks and crotches and picked all the rotten apples, which with all refuse under each tree was gathered together and burned.

Then I went at the pruning, determined to be unmerciful. I cut off the thrifty bunches of sprouts at the base of each tree trunk. All dead or broken limbs were removed. Next I cut out such of the live limbs as unduly obstructed the entrance of the sunlight or caused the tree to appear unbalanced. Each limb was cut close to the body and each would be promptly painted with roofing paint. I had no set rule to follow in doing

the pruning, but kept in mind the ideal of an open well-balanced tree, and then used a little "horse-sense" in working to attain that ideal.

## THE SPRAYING CAMPAIGN

Early in March, 1912, while the trees were yet dormant, I began my campaign of spraying. The first application was of lime sulphur, 20 gallons to each 200 gallon tank, applied through fine nozzles, pressure-gauge registering 225. Just before blooming period, the second application was made, using 6 gallons of lime and 8 pounds of lead arsenate to each tank, same nozzles and pressure used as before.

Third application was made when the bloom was off, but before calyx cups were closed. The solution applied was 4 pounds lead arsenate to each tank. This time I used Bordeaux nozzles under 250 pounds pressure.

About June 1, I applied 16 pounds lump lime, 16 pounds bluestone and 8 pounds lead arsenate to each tank, using whirlpool nozzles under 200 pressure.

The fifth and last application was made about July 1, and the solution was the same as that used in application No. 4 and described in preceding paragraph.

No solution was ever allowed to stand over night, and the spraying was done only on sunshiny days. All the way through, the work was done according to the very best advice I could get from U. S. Agricultural Department and North Carolina Experiment Station.

## THE RETURNS

The early trees began to give returns in July, 1912, among the number being nine Horse apple trees which produced 27½ bushels of prime fruit in a season of great scarcity, which I readily sold at \$2 per bushel; two Virginia Beauty trees, 15 bushels, bringing \$1.50 per bushel at Thanksgiving; one Shockley produced 30 bushels, which I easily sold for \$1 per bushel. An old Limbertwig, 31 bushels, which brought \$1.25 per bushel in February and March 1913; three Edwards Winter, 30 bushels, netting \$37.50; nine Winesaps netted \$84; two Mattamuskeets \$35.

Thus from 28 trees which in the past several years had produced only small yields of unmarketable fruit, I had in the first season sold 248 bushels of first-class fruit, receiving \$315.25. I figure that \$115.25 would be ample to cover all cost of explosives, spray materials, labor, depreciation of

power outfit and all other items of expense in connection with the work done on the trees, thereby leaving me a clear profit of \$200. This takes no account of 150 gallons of cider made from inferior fruit—inferior from the point of size only, all being practically sound and free from worms—nor of a plentiful supply for home consumption in canning and making jelly.

In the two seasons since then, the trees have been holding well up to the record set in the first, no commercial fertilizers being used, only ashes and barnyard manure under drip or edge of limbs. I cannot say how long it will be before these trees will need the dynamite treatment again or cease to respond to the effect of spraying, though it would seem that ten or fifteen years would be a very conservative estimate.

## Apple on Mountain Ash

A despatch from Washburn, Wis., says:

Andrew J. Fraser, who owns a fruit and dairy farm west of this city, is winning for himself the name of "the Burbank of the North" as a result of some of the work he is doing on his farm. Mr. Fraser prides himself on fruit raising, and his experiments are largely with grafting of apples of different types from one tree to another. In this work he has been very successful.

One of the latest of Mr. Fraser's experiments is the grafting of an apple scion onto a mountain ash tree, a thing that has been considered impossible because the mountain ash is of a different family from the apple.

Mr. Fraser made the graft last spring and those who have seen the graft growing thought it would die, but during the season the graft made a growth of 18 inches. This spring Mr. Fraser invited a number of persons to his place to see apple blossoms on this graft and he predicts that the graft will produce fruit. The success of his experiment is being closely watched.

There are many large ash trees in Washburn and if Mr. Fraser's experiment works out this county may be producing a "mountain ash apple" before many years.

## Lemon Crop to Exceed Demand

According to the figures compiled by Manager G. W. Hosford, of the San Dimas Lemon Growers' Association, the largest of the kind in the state, California will, during the next ten years, produce more lemons than are consumed at present in the United States. As one of the first steps for taking care of the rapidly increasing crop, Mr. Hosford announces that next year the lemon growers will inaugurate a national campaign of advertising on a large scale to increase the consumption of lemons.

## The Monroe Nursery

Established 1847

Offers a fine stock of

**Peach  
Currants**


**Gooseberries  
Berberis**

**Spirea Van Houtte**

Other Ornamental Shrubs. H. P. Roses, Etc.

Will be pleased to quote on your list of wants

**I. E. ILGENFRITZ' SONS CO.**  
MONROE, MICH.



**GARDEN LITERATURE  
FREE!**

CATALOGUE OF BOSKOOP NURSERY STOCK  
or HANDBOOK for NURSERYMEN and FLORISTS.  
THE PÆONIA.  
HOW TO FORCE LILACS. Illustrated.  
HOW TO FORCE RHODODENDRONS.  
F. & O. NURSERY-CODE.

THEY ARE PREPARED FOR YOUR USE. GET A COPY.  
A POSTCARD WILL BRING THEM.

**FELIX & DYKHUIS**  
HIGH GRADE NURSERY STOCK  
BOSKOOP-HOLLAND.

## Why Good Trees Are Worth More

In a communication to Green's Fruit Grower, Samuel Fraser, Geneseo, N. Y., says:

Apple trees may be bought for ten cents or for twenty cents when purchased in lots of one hundred of one kind. There is a possibility that both trees will leave some profit to the grower; in other words, a certain class of American nurserymen are catering to the demand for a cheap tree. The public can have what they pay for and no more. The fruit grower who wants a tree well-grown on first class roots, propagated with care, will have to pay for it sufficient to reimburse the man for the additional expense. For instance, in the East, it is believed that French Crab stocks are the best for apples because the roots are cleaner from aphids, crown gall, hairy root and other diseases which are now recognized as dangerous to introduce into the orchard. Second, they thrive better under Eastern conditions. In this particular instance the American grown, for instance Kansas grown, seedlings during recent years could be purchased at one-third the price of the highest grade French grown seedlings. Naturally the man who is growing cheap trees would purchase straight rooted American grown seedlings. These are then grafted in the winter and are probably sent South to be grown in some section where the growing season is longer than it is in the North. In this way the trees produced are of good size and are grown at a minimum of expense, and such are often planted in our Northern orchards. Should a Northern nurseryman purchase American grown or French grown seedlings, he may either grow them until August and then bud them or graft them as before mentioned and grow his trees for three seasons to secure a satisfactory size. The trees grow slower, but the slower grown tree weighs more than a fast grown tree of equal size.

There are nurserymen who are taking pains to cut buds from strong growing profitable trees, who are trying to produce trees true to name and give the purchaser all he

is willing to pay for. The question is simply for the fruit grower to decide whether it is worth while to encourage the man who is trying to do his best or whether he will run the chance and purchase from the indifferent grower. It is surprising the number of men who will take the gamble and feel that for ten cents they can buy a first-class tree. There are trees and trees, and none know it better than the nurseryman.

Whoever plants an apple tree, especially along the Atlantic Coast or even the North central states, has made an investment and has made up his mind to expend from \$3 to \$5 in taking care of each apple tree before it will be in bearing. I think if one will carefully work out the cost of carrying an apple tree to bearing he will find it will be somewhere between these figures. How foolish, then, to stop at five or ten cents in the initial expense, for the possibility of the tree repaying the expenditure depends to an enormous extent upon the judgment used in the first purchase. If a cheap, poorly grown tree and one with a poor root system is planted, one may never get the reward. It is interesting to note that in this year of an enormous crop, the average yield of the bearing trees of the United States is less than one-half a barrel per tree, that frequently it is only one-tenth of a barrel per tree; in other words there are a lot of drones in the orchards, and for the live fruit producers the important question is: Am I going to plant a drone tree or a producer? There are apple orchards in New York State this year which are averaging ten barrels per tree, that is, there will be a block of orchard, five acres or even ten acres or more, from which an average of ten barrels per tree will be packed. These orchards for a term of years will turn in a gross revenue of from \$20 to as high as \$40 per tree; in other words, one single apple tree will turn in as much money as an acre of beans or wheat or as much revenue as the average cow of the state. Men will expend \$50 in buying a cow and have to feed her three

times a day and milk her twice. The same farmer who is going to buy an apple tree, when he contemplates purchasing a horse will always prefer and pay more for a well-bred well-put-up, close-coupled work horse because he can do more work. If he is well-bred in one of the lines of the draft breed, he is worth more than a scrub. He will pay more for a cow capable of producing 10,000 pounds of milk than for one whose maximum is 4,000. Why not use the same head in buying trees? If in doubt as to the difference there is between trees take a day and visit some reliable nurseryman or two or three of them and be from Missouri—be shown—and don't buy until you know what you are buying. If apples are to be grown cheaper, the man who purchases trees which will be good producers will certainly be able to stay in the game and make money, while the man with an ordinary scrub tree would starve. Think of the time and energy which the planter and his children will waste growing a scrub tree when they might be reaping dollars by caring for a good one. We never get something for nothing. It costs more to grow a tree right than to grow a scrub, just as it costs more to grow a pure bred cow than to grow a scrub cow.

Although we do not know much about it as yet, the work with oranges and lemons and the variation which is known to exist in other fruits lead us to wonder whether there are not individuals in every variety which are better than others of that variety and whether they are not the ones to use for parents. Naturally the nurseryman who spends time searching for such trees and carefully growing them on first-class roots must at least get his living and be repaid for the additional expense, but it is up to the fruit grower who buys the trees to determine whether he shall get his due reward. Unfortunately not all who say they are doing this selection are doing it and it is a case where the buyer must beware.

Just say you saw it in AMERICAN FRUITS.

### *All This Talk*

Of "the best we ever grew" and "we never saw better," in most instances doesn't mean much. Because--

You hear it every day--every year. The good growers use it and the poor growers use it. Everybody uses it. It's applied to any and every block of stock that's for sale. The stock that's right--the good stuff--speaks for itself. We'll gladly send samples.

**Apples**                      **Crab Apples**                      **Pears, Standard and Dwarf**  
**Cherries** on Mahaleb or Mazzard  
**Plums, Japan and European**  
**Quinces**                      **Peaches**                      **Currants**                      **Gooseberries**  
**Ornamental Trees**                      **Shrubs**                      **Climbing Roses**  
**Perennials**                      **Clematis, Paniculata**                      **Butterfly Bush**

See our December 1st Surplus List for a complete list of varieties and prices. If you do not get our lists, drop us a line and we'll see that you do.

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# Events in Nursery and Orchard Rows

## Special Reports to "American Fruits"

**Successful Grafting on Wild Crab**—"I heard it stated that a wild crab was one of the best stocks to top-work on. I will verify that statement, saying I believe it to be the best on earth. I have both Pattens and N. W. Greening on it, and I never had as good unions in any grafting before. The second year I had one fine Northwestern Greening, the next year twenty-one fine ones, and the last year 132, every one perfect, and the Pattens had one cluster this year of seven, all touching each other on one twig. Me for the wild crab."—G. F. Greening, Grand Meadow, Minn.

**Spraying System for Florida Citrus Fruits**—In order to minimize the damage done by insect pests to citrus fruits in Florida, which on the average amounts to from 25 to 40 per cent of the crop, the Department of Agriculture has worked out a spraying scheme which has given striking results in the three years that it has been practiced. Practically all of the damage that insects do to citrus fruits in Florida can be attributed to six species. The most destructive is the citrus whitefly; the second the purple scale; and the third the rust mite. To do away with these pests Government specialists advocate four sprayings, two of which are primarily intended to kill the whitefly and scale insects and the two others to destroy the rust mites.

The cost of following such a scheme is estimated at from 20 to 35 cents a year; for this outlay the trees yield not only more abundant but much larger fruit. The increase in the size of the fruit alone should result, it is estimated, in an increased production of from 12½ to 25 per cent, amounting approximately to 2,000,000 boxes for the entire citrus crop in Florida. If this scheme was followed throughout the entire state it is thought that the output would be at least 25 per cent greater than it is now, and that the appearance of the fruit would also be much better. In one orchard, sprayed rows yielded 60 to 70 boxes of fruit while adjoining rows which were left unsprayed had only about 5 boxes.

**Forest Day Instead Of Tree Day**—For the past two years The New York State College of Forestry at Syracuse has been interesting high schools in the planting of one or more thousand trees on Arbor Day in the place of the planting of a few shade trees only. That is, the College is urging that Arbor Day be made a forest day in place of a tree day. The right kind of evergreens or hardwoods for planting in different parts of the State may be ordered through the College at from \$3.50 to 5.00 per thousand. In most instances the College is urging the use of rapid growing evergreens. In every community there is a piece of idle land, such as a barren hillside, the owner of which will be glad to have it planted up to trees. If the pupils of the school or the school will purchase a thousand or two of trees and set aside a day or more for their planting, as may be needed, the College will send one of its foresters out at no expense to supervise the planting. This is done because the College feels that if the boys of the State help in the planting of a forest, the forest fire question will be very largely settled. No boy who has helped plant a thousand trees and has watched them grow will go into the woods and leave a camp fire or throw down a burning match.

**Moving Large Trees**—The State Forestry Co., Indianapolis, Ind., has recently moved large shade trees successfully. "The secret of the successful transplanting of mature trees lies in lifting a sufficient ball of earth around the roots of the tree to make sure that it will have its native soil in its new place," said A. W. Brayton Jr., manager of the forestry company. "This process preserves intact the fibrous roots upon which the life of the tree depends. To expose those roots causes them to shrivel and before the tree can reproduce them it gets such a back-set that death is likely. We lift the tree and earth bodily by derricks and put the load on wagons."

**Rare Australian Seeds**—Prof. Henry G. Walters, Langhorne, Pa., has received seeds of interesting plants from Australia for testing in Pennsylvania. He says: "Among the most rare of the botanical specimens I have received are seeds of a lovely tree bearing royal purple flowers in great profusion, and also carrying a tremendous jaw-breaking 'highbrow' name. Specimens of the glory pea of New Zealand, the Victorian lilac and the gorgeous, bright scarlet hypericifolia have arrived. The Australian cassia is ornamental and showy, and should delight Pennsylvania plant lovers. I also have some seeds of a beautiful Australian evergreen tree with orange colored flowers, known as the Christmas tree of West Australia, not to mention the Australian flannel flower, a lovely variety of the common broom plant; specimens of the Australian bean climber, the Victorian olive tree, the allspice tree and the wonderfully fragrant baronia. Specimens of Australian passion flower, spear lilies and wax flowers are also in my possession." One of the largest trees, said Professor Walters, measured 470 feet, by actual measurement in Australia, and was 81 feet in circumference near the root. He has several seeds of this tree.

**Medicinal Value of Grape Fruit**—Grapefruit, especially, is rich in medicinal properties. From the bureau of plant industry at Washington, D. C., comes the statement: "This citrus fruit possesses marked tonic properties. Its pleasant and mild acid flavor makes it a pleasant appetizer and an easy stimulant to the secretion of the gastric juices. The mineral salts contained in grapefruit have a mild laxative influence on the liver. The bitter principle has the same quality as that of cinchona from which quinine is produced."

**Utilizing the Waste**—Near the packing house of a California fruit canners' association 400 tons of peach pits were allowed to pile up. To the uninitiated these pits would be considered as so much waste to be disposed of, just to get them out of the way. But not so; the pits were cracked open, the meats removed and shipped away for the manufacture of prussic acid and for sale as bitter almonds, and the shells were sold as fuel. Thus does this waste become a source of great profit.

**Cold Climate Peaches**—W. L. McKay, Van Dusen Nurseries, Geneva, N. Y., recommends the White Chinese cling seedling peaches. Greensboro, Carman, Champion and Belle of Georgia, ripening in the order given. Champion is white, and originated in Illinois; Greensboro originated in North Carolina, Carman in Texas, and Belle of Georgia in Georgia. Strange to say, these four peaches are exceptionally hardy. Their young wood and buds will survive heavy freezing, such as would put Crawfords on the brush pile. At Geneva, N. Y., 20 degrees below freezing has not injured these varieties, fruiting well on very heavy soil with underlying clay. In cold regions in New England and other northern states, where it is said to be impossible to raise peaches, try the hardy white peaches mentioned, or the still harder yellow ones, Crosby, a Massachusetts peach; Hill's Chill, a New York variety, or Fitzgerald, from Canada.

**California Fruit Growers' Exchange**—The California Fruit Growers' Exchange, the co-operative marketing agency of the citrus growers of the state, won a real victory, when at a meeting of the Exchange officials in Los Angeles a new exchange was voted into membership, bringing into Exchange control 600 cars of fruit formerly marketed by independents and increasing the Exchange control in Tulare county from 12 to 15 per cent. The new organization will be known as the Lindsay-Merryman Citrus Fruit Exchange and its membership will comprise some of the largest and best known growers of Tulare county. The new organization starts with four packing houses and two more houses will be built. The California Fruit Growers' Exchange comprises 150 citrus organizations in California, with about 6500 growers affiliated. During the 1913-14 season, Exchange shipments of citrus fruits from California totalled 28,186 carloads or 11,262,185 boxes. The returns aggregated \$19,246,757, f. o. b. California points, or with a delivered value of \$29,434,402. Losses through bad accounts for the season were \$335, of one-five hundred and twenty-fourth of one per cent. The cost per box was 5¼ cents, or 2.2 per cent on gross sales. The Exchange maintains salaried representatives in every jobbing center, devoting their time and energy exclusively to the interests of the Exchange grower.

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# Profit and Loss In Farm and Orchard Work

E. A. SMITH, Vice-president Jewell Nursery Co., Lake City, Minn.

It appears at first as though it would be a very easy and simple matter to keep a farm and orchard account, the importance of which is just as necessary as the keeping of any other account, yet I venture the assertion that there are many orchardists who fail to keep such an account, or who can tell at the end of the season what their profit or loss has been either on the entire orchard or any special variety of apples. A hit-or-miss way of keeping accounts is just as disastrous as a hit-or-miss way of doing business.

Statistics show that more than eighty per cent of men who enter business fail—why? There are many reasons, chief among them is the inability to keep a correct record of their profit and loss account.

Successful business figures in fractions of a cent ratio, and that fraction determines the success or failure of a business venture. To illustrate: A certain manufacturer employed 2,500 men—his profit was \$50,000 a year—he lived in luxury, had automobiles, spent a part of the year in Europe. His employees envying his good living thought they ought to have a larger share of the profits, and in a body struck for higher wages. The manufacturer said to the spokesman, "Would your men be satisfied if I were to offer them an increase of 37½ cents per week?" "Satisfied!" said the spokesman, "They would feel insulted." "Very well," said the manufacturer, "then I shall have to close my factory and you will get nothing from me, for 37½ cents per week or 6¼ cents per day, represents my actual profit on each man's labor, and I have to find mar-

kets for my product and take all the responsibility of the business, its success or failure. If I now pay you all of my profits, in case of loss, how much are you men willing to pay me in order to restore me a reasonable profit?" The men had not reasoned on this basis—They went to work again.

## Orchard Profits

Now, if in the manufacturing business the margin of profit runs so close that it becomes necessary to figure the fraction of a cent profit on each man, why may it not be equally important in farm work or in the orchard to keep just as close watch of the profit and loss upon the labor of each man, or each apple tree, or each acre as you may choose to figure it.

Last fall I passed a farm where a corn shredder and men were at work. They were filling a silo. It is not every farmer that can afford to keep a corn shredder, as his acreage will not warrant his doing so. I thought, does this farmer know just what it costs him per day to run this shredder, including depreciation, interest, time, etc., and what does it cost per ton to fill the silo. With these items figured out, this corn shredder would be made to do business for the neighbors at a profit to the owner as well as to the neighbors, besides being a convenience to them.

One objection to co-operative farming and the owning of farm machinery by several parties is, that each want the machine at the same time and dissension may arise, whereas, if one man owns the machine, he can fix a date which will be satisfactory

to the different parties who desire the use of the machine.

## Reducing Costs

The same principle would apply to a small cold storage to be erected in the locality where there are several orchards. The cost of a cellar, interest and upkeep of the same can be figured out on a basis that will be profitable to the owner, a convenience as well as a profit to those who wish to avail themselves of the storage. In this way orcharding could be made more profitable, for which it becomes necessary to dump the fruit on the market immediately upon gathering, there is often a surplus and it has to be sold for what it will bring at the time, for it was probably gathered in unseasonable weather and quick decay may result unless proper care is given it. If a man grows only 50 to 100 bushels or barrels of apples, it will scarce pay him to build a cold storage cellar, but where there are several orchard growers in a given locality, one storage plant would readily accommodate them all at a comparatively small cost. In such cases, it becomes absolutely necessary for the owner of such a plant to know what the cost of storage would be that he may figure out a reasonable profit for himself on such a basis as will warrant the neighbors storing their apples with him until they are marketed.

Concrete plays an important part in farm work nowadays. It is cheaper and better than stone, even if there is a quarry on the man's place, but not every farmer can afford to own a concrete mixer. If there is considerable work to be done, one man in

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Nurserymen who have heretofore depended on Europe for their young Evergreen plants can now be assured of a good reliable source of supply right here in America, and we solicit the opportunity of quoting on your requirements.

"Made in U. S. A." and "American Stock for American Planters" should, from now on, more than ever, be the slogan of American Nurserymen, for it means "money saved in the long run" to start with nice, strong, sturdy, vigorous American-grown stock which has been produced right here in America.

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the community could, no doubt, be prevailed upon to buy a mixer, which could be used for the benefit of his neighbors and at a reasonable profit and convenience to himself and neighbors. The cost of operation per day or the cost of handling the cement at so much per ton could easily be figured out. The convenience would be a big item and at the same time the investment would prove a good one.

These are but a few of the things we could mention which would reduce the cost of farm living and farm production. In competition with cheap foreign labor, it becomes more and more necessary every year that the cost of production be reduced, and machinery is the only avenue we have for reducing the cost, for it is not practicable or desirable to reduce the pay of the American wageearner to the same basis as that of his foreign competitor. Such a reduction would disturb the economical conditions of our country to such an extent that it would either result in starvation or revolution.

#### The Practical Side

Now as to the practical side and how to keep account, say of an orchard of 1,000 trees, which consists of four varieties—first, the value of the land must be decided upon, then the cost of preparing it for an orchard, the taxes and interest are to be reckoned from the time the work for preparation commences, the trees, planting, care, losses through replacing, expense of marketing, cost of crates, barrels, boxes, repairs, insurance, freight, horses, men and every item that means money. If this is not correctly done, of what value is the account? Let me ask, how many orchardists do this? How many farmers are there who can tell which department on the farm pays the best and

**NEW PEACH—WILMA.** Originated in the famous peach belt at Catawba Island, Ohio. Selection from several thousand Elberta seedlings, several hundred of which were tested in orchards. An Elberta type of peach both in foliage and fruit, but one week later. Heretofore our stock has been used in the vicinity where it originated. Offered to trade in limited quantity.

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gives the largest percentage of profit and how much?

To what extent should the keeping of the orchard expenses be carried? It is a well known fact that some varieties of apples pay better than others. Perhaps one year the early apple will bring the profit—another year the late variety. It takes a series of years to determine which varieties in the long run are the best. With four varieties in a 1,000-tree orchard, an account with each variety should be kept separate, including the yield, replacing, trimming, picking, receipts, etc. The result may prove so surprising that in time an orchard will consist of only two varieties, those which pay the best. The result in any case will be well worth the effort.

#### May Carry To Excess

I agree that the work of keeping a close account of everything may be carried to such an excess that it becomes expensive and even burdensome. To what extent it should be carried is for each to decide. His good sense should tell him where to stop.

People do not farm and plant orchards for their health or pleasure alone. As a rule, they do it for profit. There is pleasure in profit. The correct account is an adjunct and asset, for it helps locate the strong and weak parts in the system. An account then, should be established for the orchard

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department, and the orchard must stand its share pro-rata of the over head expenses and general cost of operating it.

There is a satisfaction in keeping accounts, in comparing with preceding seasons, watching the result, retrenching here, enlarging there, profiting by the past. Experience put in black and white beat the memory in any market.

#### Incorporations

The Epperson Nursery Co., Portland, Ore.; capital stock \$2000. C. A. Epperson, James G. Kelly and E. Langley of Portland.

Grand River Orchards Co., Geneva, O.; \$10,000; Willis F. Mann and others.

The Piedmont Orchard Company, Cleveland; \$5,000; G. Campbell Mills, H. J. Norrfs, M. MacLennan, B. A. Baskin and C. L. Nelson.

The Blue Mound Nursery Co., West Allis, Wis., has been incorporated; capital stock, \$6,500; incorporators, Theodore I. Ferguson, R. C. Hollbrook, F. N. Ferguson, A. C. Hanson.

Potomac Gardens, Incorporated, of Alexandria, Va., with maximum capital stock \$50,000 and minimum \$1,000. The object is to conduct a nursery, and the officers named are Richard B. Washington, president, and Louis N. Duffey, secretary, both of Alexandria.

If it relates to Commercial Horticulture it is in "American Fruits."



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## Program Western Association of Nurserymen

**T**HE annual meeting of the Western Association of Nurserymen will be held in Kansas City, Mo., Dec. 8-9, under the direction of the president, C. C. Mayhew, Sherman, Texas, and the secretary-treasurer, E. J. Holman, Leavenworth, Kansas. The members will be welcomed in an address by Henry L. Jost, mayor of Kansas City, to which J. W. Hill, Des Moines, Ia., will respond. Following the president's address and the annual report by the secretary the association will consider a proposed amendment to the constitution providing for honorary membership for those who have distinguished themselves as nurserymen, and for those whose fellowship and assistance have promoted the interests of the association.

Among the matters of business to be considered also is a resolution proposing changing of the date on which the annual meeting shall be held.

The program for the convention, presented herewith, is, as usual, a model of the kind. We have before directed particular attention to the exceptional quality of the programs of the Western Association, and consequently the highly valuable meetings. For thoroughly practical, timely and helpful discussion these programs are unequalled. Lloyd C. Stark, Louisiana, Mo., has been chairman of the program committee for some time, and we presume he is still acting, in that capacity.

We particularly direct attention to the wide range of topics of direct interest and the highly representative character of the participants scheduled in the following plan for the meeting:

### THE PROGRAM

Report of the Conference with Seedmen's Convention—W. P. Stark.

Report of Committee on Tariff—W. P. Stark, F. H. Stannard, J. W. Hill.

Report of Committee on Trade Terms—J. W. Schuette, E. P. Bernardin, H. B. Chase.

How can the wholesale nurserymen avoid loss from so-called poor collections?—Peter Youngers.

The effect of the tendency of eastern nurserymen to grade No. 1 plum, cherry and pear eleven-sixteenths instead of three-fourths—J. H. Skinner.

Over-production and the relation of the apple seedling grower thereto—C. W. Carman.

The policy of giving away nursery stock at the end of the season—negative, E. H. Balco; affirmative, George Holsinger.

Should the wholesale and retail nurserymen confine their operations strictly to their respective spheres?—J. W. Schuette.

Benefits of the re-organized American Association and our relation thereto—J. R. Mayhew.

The influence of the war on the demand for nursery stock. Can a better demand be expected after the conflict is over?—L. C. Stark.

The benefits of parcel post and the advisability of requesting an adoption of containers that will not damage nursery stock while in transit.—Carl Sonderegger.

Ways and means of providing the nurserymen with reliable statistics on the supply of growing nursery stock—E. J. Holman.

The state nursery stock laws and interstate commerce—Curtis Nye Smith, Counsel Am. Association Nurserymen.

The condition of the nursery business in the East.—William Pitkin.

The maintenance of wholesale prices and the immediate loss of business thereby.—Henry Chase.

Who are entitled to receive trade lists and the effect on the wholesale and retail prices when used indiscriminately.—J. H. Dayton.

Transportation.—Charles Sizemore.

Is there an increased demand for a higher class of ornamentals? Should ornamentals be grown chiefly by specialists? Is there danger of over-production in the ornamental line?—Frank Weber.

The hardy pecan and extent of latitude in which it may be profitably grown.—W. C. Reed.

The new Oklahoma state law pertaining to the nursery business.—Jim Parker.

Question Box: Members are urged to make use of the question box by depositing at any time, any subject on which a discussion is desired.

The Conard & Jones Co., West Grove, Pa., was awarded a gold medal at the San Francisco and San Diego Expositions, this year, for rose exhibits.

Apples plucked from the oldest apple tree on the Pacific Coast, in Vancouver barracks, Wash., have been sent to the Department of Agriculture by A. A. Quarnberg, former horticulture inspector of that district. The famous tree is almost ninety years old and produced a fair crop of apples this year.

It is reported that a motor-driven machine for cleaning and grading fruit, that has just been brought out in Oregon, is capable of handling apples, peaches, pears, oranges and lemons, and of distributing them into ten yards at the rate of over 17,000 pieces an hour.

The 1914-1915 citrus fruit shipping season closed on October 31, showing the second largest total of any year, that of last year holding the record with 48,548 cars, according to Coast reports. The total for the season just closed is 46,862 cars, which is near that of the season of 1910-1911, when 49,394 cars were shipped.

Kentucky's apple crop this year is the largest in the state's history and it is also one of the finest. Every tree in the state that is possessed of life at all has borne a full quota of fruit, while those which have been properly cultivated and cared for have produced still more abundantly and the fruit has been of correspondingly better quality. The estimate of the state agricultural department is that the crop this year will total 10,501,000 bushels, as against 9,000,000 bushels in 1914.



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## American Fruits

### An International Journal

Nurseries, Arboriculture,  
Commercial Horticulture

AMERICAN FRUITS PUBLISHING CO., Inc.

Ellwanger & Barry Bldg., Rochester, N. Y.

Phones: - Main 1602; Main 2802

RALPH T. OLCOTT, Pres. and Treas.

Chief International Publication of the Kind

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ROCHESTER, N. Y., DEC. 1915

"Horticulture in its true sense is the art of cultivating tree fruits, small fruits, vineyards, nut trees, flowers, ornamental shrubs, trees and plants and all kinds of vegetables. Horticulture is one phase of agricultural activity that is not only necessary for the support of mankind by furnishing fruits and vegetables for his consumption, but tends to make his life more enjoyable by giving him flowers, shrubs and trees to decorate his home, both indoors and out."—Nebraska Horticulture.

### Commercial Apple Crop

The American Agriculturist gives these estimates of the commercial apple crop in the different sections of the United States and as compared with preceding years are given as follows:

	1915	Barrels
New England	.....	2,850,000
Middle States	.....	14,850,000
Central West	.....	8,900,000
Far West	.....	4,740,000
Southern States	.....	5,050,000
All other	.....	2,500,000
Total United States	.....	38,890,000
	1914	Barrels
New England	.....	4,270,000
Middle States	.....	18,340,000
Central West	.....	6,225,000
Far West	.....	5,830,000
Southern States	.....	6,700,000
All other	.....	3,000,000
Total United States	.....	44,365,000
	1913	Barrels
New England	.....	2,670,000
Middle States	.....	12,010,000
Central West	.....	5,500,000
Far West	.....	4,170,000
Southern States	.....	3,700,000
All other	.....	3,000,000
Total United States	.....	31,050,000

As an apple state Arkansas with 7,650,000 fruit-bearing trees ranks sixth among the states. She is close behind Pennsylvania, which has 8,000,000; Ohio with 8,505,000, and Illinois with less than 10,000,000. Missouri leads with 14,36,000, and New York is second with 11,248,000. These are the government figures recently issued by the Bureau of the Census of the Department of Commerce and Labor. And the same authority sets forth that whereas that in the decade 1900-1910 there was a decrease throughout the United States of 33.4 per cent. in the number of fruit-bearing apple trees, Arkansas showed an increase from 7,486,000 in 1910 to 7,650,000 in 1910. Since then there has, it is believed, been a very material increase which will show in the next census reports, as there have been thousands of acres set out in apple orchards in the last few years.

This is borne out by the statistics of young trees not bearing when the figures for the 1910 census were taken. In the number of trees too young to bear Arkansas was then second in the list with 3,940,000, with the state of Washington first with 4,863,000.

### The Record for 1915

The history of the Nursery Trade and Commercial Horticulture for 1915 is recorded in detail in Volumes XXI and XXII of American Fruits, the index of which appears at the end of this issue. It has been the aim of the publishers to record current events faithfully and comprehensively. The many exclusive trade news items in every issue throughout these volumes attest the truly representative national and international character of this journal and make the bound volumes an unequalled record of the great industry they represent. Calls for back numbers have become more and more frequent, indicating the value attached to the record therein. Federal and state government libraries have been particularly desirous of keeping their files intact. We have been obliged to disappoint many who have waked up too late to procure numbers of an edition exhausted. There are still some nurserymen and planters who ignore the value of a reference medium in their special line, until occasion arises for such reference. Then what they could have procured for 12½ cents is not obtainable at any price.

The hearty co-operation of those in the trade is making American Fruits an exceptional publication. Its columns are contributed to by the leading representatives of an industry whose importance is more and more recognized as one of the principal sources of production for human consumption and the greatest of all sources for landscape improvement. The possibilities for development of this industry have been repeatedly set forth in American Fruits which urged to fruition the NEW CONSTITUTION OF THE AMERICAN ASSOCIATION OF NURSERYMEN adopted in Detroit, Michigan; and the DEFINITE PLAN FOR THE FORMATION OF AN AMERICAN FEDERATION OR HORTICULTURE presented in Berkeley, California. These are accomplishments enough for one twelve-month. They constitute the most important national actions in the history of the trade for 1915.

### The Apple Shippers

The International Apple Shippers' Association, which will hold its convention in New York City for the first time next August as a result of the efforts of The Merchants' Association's Convention Bureau, includes the largest producers and dealers in apples in thirty-seven states of the United States, the Provinces of Nova Scotia and Ontario, Denmark, England, Scotland and Germany.

The officers of the Association are E. W. Harty, president, Boston; B. F. Hitz, vice-president, Indiana; W. M. French, treasurer, New York city, and R. G. Phillips, secretary, Rochester. The organization has an executive committee, a long list of special vice-presidents, and standing committees on subjects of interest to apple growers and apple shippers.

The organization has performed great services to the apple industry in promoting better grading and packing, the passage of national and state grading laws, the use of standard packages, storage in transit, the adoption of estimated weights, land transportations in general, and ocean transportation.

The International Association was formed in Chicago in 1895, and it was never stronger nor more prosperous than at this time. One of the features of the meeting will be an apple exhibit for which prizes will be awarded. The President's Cup was won last year by W. S. Teator, of Upper Red Hook, New York. The exhibits are of great interest and are important in the promotion of apple cultivation.

### Lessons from Indiana

The apple shows which in recent years have been regular fall features are wonderful educators. The assertion is frequently made that investors need not go to the Northwest to find orchard opportunities, but until the practical evidence of what can be done in apple culture in the middle and eastern states was presented at the apple shows referred to, many persons were convinced by the attractively packed fruit from the Northwest that it was only there that results could be secured.

One of the greatest of the season's apple shows was that of Indiana, in Indianapolis. The exhibits were very large and representative and attracted universal admiration and enthusiasm. Incidentally there were displays by nurserymen, for hand in hand with orcharding must come nursery tree planting. W. C. Reed, Vincennes, Ind., also had a display of Persian walnuts, hardy northern pecans and other nuts; also nursery trees of grafted varieties of nuts. The management of the show made this announcement:

The purpose of the Indiana apple show is twofold. The first aim is to aid the fruit growers of this state to produce better apples and to market these in a way that will do credit to the state. The second purpose is to impress the public with the fact that Indiana is growing as good apples as grow under the most favorable conditions anywhere else in the world—better apples so far as flavor and keeping quality are concerned.

The apple show emphasizes the fact that Indiana this year grew more than twice as many apples as the state of Oregon; 50 per cent. more than the state of California, and even more than the state of Washington.

Indiana has five and three-quarter millions of bearing apple trees and about two and one-half millions of trees not yet in bearing. Indiana's total of apple trees outnumbered that of the state of Washington and is practically equal to the combined totals of bearing and non-bearing trees for both Oregon and California. This state has more than half the total of trees to be found in the state of New York, which is the leading state for apple production in the entire United States. This year Indiana produced more apples than the combined states of Colorado, Idaho, Montana, Wyoming, Nevada, Utah and Arizona. If all the orchards in Indiana received the attention given the average commercial orchard, the production of this state would exceed that of all except three or four of the states in the Union. As it is, Indiana ranks seventh in production for a ten-year average, being exceeded only by New York, Pennsylvania, Ohio, Michigan, Illinois and Missouri.

These facts should convince residents of Indiana that it is a mistake in business judgment and an economic waste for them to spend \$2,000,000 or more annually for Western fruit lands and another \$2,000,000 annually for fruit shipped in from other states.

It has been proved time and again that Indiana can produce choice apples at 5 or 10 cents less than in the Pacific Northwest, and can market these at a saving of 30 to 35 cents a bushel.

The Northwest can well boast of its fine looking fruit and its excellent packing methods, and with proper distributing methods there should be a market for all the fruit that can be produced.

Have you your copy  
American Fruits  
Directory of Nurserymen?  
1915 Edition



## Active Work In Breeding New Apples

IN THE ordinary course of business, nurserymen and orchardists devote their attention mainly to the propagation and planting of existing varieties of apples, content to make the best of what they have at hand. This is natural and of course the thing to do. Years ago there was lively competition in the manufacture of carriages, oil and gas lamps and cumbersome cameras. Producers made the best of what was at hand. That was before the days of the automobile, the electric light and the kodak. But investigators were at work, as they are now, in many fields of endeavor and the dreams of half a century or more ago have been so long a reality as to be commonplace. Until better apples than are now catalogued by nurserymen are produced, the present varieties must occupy the attention of the growers. But the plant breeders are at work. Horticulturists realize that if there is to be progress in fruit growing new and better varieties must be produced. The application of Mendel's Law establishing some elementary formulas of heredity has given impetus to plant breeding. That the need of such work is apparent is shown by the statement by Prof. U. P. Hedrick, of the Geneva, N. Y., Experiment Station, recently:

Of the 698 varieties of apples described in The Apples of New York, both male and female parent are certainly known for only one variety; one parent is known and the other guessed for two other kinds; four are held to be sports from known varieties; and the female or seed-producing parent is given for thirty-nine kinds. Of the 650 varieties seventy-one are said to be seedlings (of unknown parentage); but for the great majority of the kinds nothing is positively known as to the origin. This poor showing for scientific, commercial or careful amateur apple breeding is due to several causes: Breeding tree fruits of any kind is time-consuming and space-demanding; the pecuniary rewards for individuals are inconsiderable or altogether wanting; institutions organized to do plant breeding have felt obliged to work in other fields where results could be more quickly secured and would mean more when obtained; and, lastly, plant breeding, especially breeding of tree fruits, has until recently seemed largely a matter of guess work and chance—a process most of whose fundamental laws were unknown.

At the twelfth annual meeting of the American Genetic Association, in Berkeley, Cal., recently, some account of the work undertaken at the Idaho Experiment Station was given by C. C. Vincent. A number of stations, particularly in New York, Iowa, Minnesota, South Dakota and Idaho, have produced trees from hand-crossed flowers of which both parents are known. The work at the Idaho station, whose object has been the improvement of existing varieties of apples by breeding, has progressed along definite lines. Prof. Vincent says:

"The need of winter varieties of apples, superior to existing types, has been keenly felt by those interested in the culture of this fruit. There are many varieties already grown that have many desirable characters, but no one of them combines all of these good features.

"The Jonathan, for instance, has the color and quality to make it a prized dessert apple, but its keeping quality is not the best and it is especially bothered with storage scald and "water core." It is also very susceptible to blight. Likewise, the Ben Davis has its desirable and undesirable features. It is a great producer, the apples are good keepers, the trees late in blooming, remarkably thrifty and free from disease. The fruit is thick-skinned and is not easily bruised in shipping. On the other

hand, the fruit lacks in crispness juices, flavor and texture, required to make it greatly prized either for home or market use. A great drawback in northern latitudes to the Ben Davis is that it is so late maturing that proper coloring is not secured except in exceptional cases.

"The good and bad points of many other varieties might be mentioned but what has already been said will serve to show the need of combining the desirable qualities of different varieties so that one variety may stand preeminently in the lead. In this connection, it should be mentioned that varieties of apples display many different types. Some trees are hardier, resist disease better, have better colored fruit, are later blooming and produce fruit of much better quality than do other trees of the same variety under the same cultural conditions. Thus in our work, we have taken these factors into consideration, with a hope that these desired characters may be intensified to their maximum extent.

"For this improvement, the Ben Davis variety has been taken as a basis using it as male and female. Crosses have been made with other varieties and from the resulting hybrids those will be selected that give promise of being adapted to conditions here.

### METHOD OF OPERATION

"The methods of securing cross pollinated fruits are much the same as those followed by plant breeders in general. The unopened blossoms are emasculated and pollen from other varieties applied when the pistils are receptive. Usually two emasculated blossoms are left to the cluster. In the fall the pollinated apples are harvested and kept in common storage until Christmas. They are then brought to the laboratory and the seed removed.

"The seeds from each cross are separated from the fruit, given a serial number and tied in muslin bags. These bags are put in 2-inch pots, placed in flats and buried where they are exposed to freezing weather. As a precaution against destruction by mice, the flats have always been covered with screen wire. Late in February the flats are brought to the greenhouse and the seed germinated. By subjecting the seed to the above conditions, we have been able to get approximately 95% germination. By the middle of May, the seedlings are from 10 to 12 inches in height; they are then transplanted to the nursery, in rows 3 feet apart, trees 6 inches apart in the row. The second season, the seedling trees are transplanted to their permanent places in the orchard, 6 feet apart each way.

During the spring of 1910, a total of 1,175 crosses was made. The seed taken from the fruit of these crosses produced 146 seedling trees. The percentage of these crosses follows:

Cross		Number of trees
Female	Male	
Ben Davis	x Jonathan.....	64
Ben Davis	x Spitzenberg.....	55
Ben Davis	x Ben Davis.....	2
Ben Davis	x Wagner.....	3
Jonathan	x Ben Davis.....	14
Winesap	x Ben Davis.....	1
Jonathan	x Jonathan.....	1
Wagner	x Ben Davis.....	4
Delicious	x Jonathan.....	2

In 1911 a total of 3000 crosses were made resulting in 1920 healthy seedlings. Other years were also marked by successes. Last year 2527 crosses were made resulting in 4544 healthy seedlings. To date there are 10,915 hybrid seedlings growing in the station orchard and nursery.

"This material will give us a splendid opportunity to study fundamental principles, useful in plant breeding. We are trying to find correlations and are working along the lines recommended by Luther Burbank. In a recent communication from Mr. Burbank, he says: 'In selecting apple seedlings, my practice has been first of all to select those which do not mildew—this can be easily done while they are young. This eliminates one of the worst qualities in apple seedlings. Next, I thin out all the very slender growers with small deeply cut leaves. These always tend back to the wild state. In the next selection, I give preference always to those having large, fat, round buds, large, thick leaves and a stocky growth.'

"Such a procedure will enable the plant breeder to discard undesirable seedlings without having to grow each plant through to maturity in order to determine its characters."

### 20,000,000 Acres Waiting

Henry Nordhelm has sold his orchard near San Francisco, Cal., for \$600 an acre and has removed to Texas. He said:

Some people have the idea that nothing grows down in Texas but cotton and cattle, and it's up to Texas to demonstrate that they are wrong. They say there are 20,000,000 acres of idle land out in Southwest Texas waiting for somebody to come along and show what to do with it. Raising apples is just about as profitable business as I ever heard of so I'm going to start up the industry right here.

Climatic and soil conditions in West Texas are well adapted to apple growing, and all the farmers in that section need somebody to show them how to go about the business. I intend to locate permanently in this state and if my many years in the apple business have not been for nothing, I am going to show the people out in California that they haven't a monopoly on the fruit business by any means.

### Strawberries In Cold Storage

By converting strawberries into crushed fruit, jellies, preserves and marmalades, the department of agriculture asserts that the annual crop of that fruit can be made to bring to the growers one-fourth more than it now brings.

"Each year thousands of bushels of strawberries go to waste in the larger producing centers of the United States because of low prices or some adverse conditions," according to a report of the department. "This is a great loss and should be avoided.

"Within the last few years some of the manufacturers of food products have been putting up fresh strawberries in large quantities for use at soda fountains and in the manufacture of ice cream. This industry offers important possibilities to the producer, manufacturer and consumer. Several large manufacturers buy surplus strawberries and put them up in the field, while others ship the fruit to their home factories.

"One of the best methods of handling the fruit is as follows: Wash the berries thoroughly in cold water, put them into tight barrels with sugar in about equal weights, load in refrigerator cars and ship to a cold-storage plant, where they can be held until needed.

If the fruit is in good condition at the time it is placed in cold storage, it can be kept for a long time without, to any great extent, losing its flavor and fresh color.

"The keeping of strawberries under refrigeration is a comparatively new undertaking, but results that have been secured indicate that in time this can be made an important industry. It is possible to keep the fruit in such a way that its quality is practically unimpaired. In a single storage house 6,000 barrels of crushed sugared strawberries were held at a temperature between 36 and 40 degrees Fahrenheit."

# The Round Table—In Common Council

## Apple Demand Strengthening

Editor American Fruits:

Our business has been satisfactory. We have had all we could handle, but it seems to us that sales were not quite up to last year, although at this time it is impossible for us to tell definitely.

It appears that there is a better demand for apples than in the immediate past. The good price for fruit is evidently strengthening the demand. On the other hand, peaches seem a little slow.

The outlook for spring seems to us unusually bright, as general business conditions are improving, and people generally are going ahead with improvements which have been temporarily held up.

W & T. SMITH COMPANY.

Geneva, N. Y.

## The Demand for Small Fruits

Editor American Fruits:

We are now in the midst of filling cellar orders and judge that our business compares favorably with last year. We notice a greater demand each year for the transplanted raspberries, blackberries and dewberries. The supply of this kind of stock is larger than usual but the demand is better and we believe the stock will all move.

Currants and gooseberries are not selling as well as several years ago and the supply is perhaps larger than should be at this time. Strawberry plants are plenty owing to the general good rains over the country.

Nurserymen are cautious about buying which will mean a good brisk business when spring opens. We look for a good clearance of stock in our line.

W. N. SCARFF.

New Carlisle, O.

## Counsels Conservative Planting

Editor American Fruits:

We have had a very good business; as good as any fall to date. What the future has in store for us I am unable to predict. I am not looking for a great boom in the nursery business next spring, but rather about normal business. I think it will be for the good of all the nurserymen in the country to plant conservatively for a year or two.

THE BAY STATE NURSERIES.

W. H. Wyman, Propr.

North Abington, Mass.

## A Refreshing Experience

Editor American Fruits:

I have had 23 years' experience as a grower of berry plants, and have enjoyed an enviable and growing trade annually. My plants this season are the equal to any I have ever grown and superior to many of the best of former seasons. My sales this season are very, very satisfactory. Never in the history of my business have I enjoyed so many orders, nor for so large quantity of stock. My last season's customers, with exception of four, have all placed business, and added to these are dozens of new, first-time customers, several of whom seem to be surprised by the unusual fine plants I have sent them, and are backing up their approval by sending so many repeat orders. Pardon me, but if you knew of the many splendid repeat orders,—some are now the third and fourth, and these from new patrons—and also occasionally some one writes me a fine testimonial report, which helps to "jolly,"—you could and would appreciate the enthusiasm. Such encouragement tends to boost my determination to grow the best—for the best trade the business supports.

WICK HATHAWAY.

Madison, Ohio.

## Strong Trade on Evergreens

Editor American Fruits:

Fall business in the evergreen line has been almost up to normal, with heavy bookings from the trade for spring delivery. Evergreen stocks in splendid conditions owing to favorable growing season. Notwithstanding war conditions, we believe the nursery trade may look forward to a good season for business.

THE D. HILL NURSERY CO.

Dundee, Ill.

## Conditions in the South

Editor American Fruits:

Conditions in the South, that is the part of the South we operate in, have wonderfully improved since last year. Our agents report collections better than they have been for years.

We think the supply of trees here is limited, especially peach. Some varieties will be short and not enough to fill orders already booked. Apple, pear and plum are plentiful.

SOUTHERN NURSERY CO.

Winchester, Tenn.

## Conditions is Northwest

Editor American Fruits:

As far as our own business and observations of the trade in general in the Northwest have gone this fall, conditions are about normal. The partial failure of corn has rather impaired the outlook, but conditions throughout the Middle West we believe to be in general about as good as they were a year ago. Most all nurserymen in this locality have been able to get their fall work done well and the cold wave and accompanying snow storm of November 13th and 14th has not been much of an annoyance. We rather look for an early winter, and while there is not as much fall ploughing done as last year, at the same time much of it is now out of the way.

THE JEWEL NURSERY CO.

R. D. Underwood, Sec'y.

Lake City, Minn.

## Some Practical Trade Suggestions

Editor American Fruits:

Crop conditions are good. General farm demand for nursery stock less. Commercial planters demand better quality and are willing to pay better prices.

General conditions of nursery trade probably more demoralized than they have been for years, especially in apple and peach. Wholesale quotations on apple trees boiled down are more particularly, what will you give us for them. Range of price being so great that no one could tell what the price was.

Better methods, better grades, better quality, truthfulness in advertising, cutting out of tree dealers, bringing the nursery business up to the same modern methods of efficiency as is being done in other lines, would, undoubtedly, put the nursery business in much better condition, with an area of prosperity ahead of them.

THE WINFIELD NURSERY CO.

J. MONCRIEF.

Winfield, Kan., Nov. 18, 1915.

A report of the Department of Agriculture states that this year's Indiana apple crop reaches the high total of 2,883,000 barrels including 2,563,000 barrels of winter apples. Of the latter 1,076,000 barrels will be marketed, the report says. The crop in Indiana for 1914 was 1,433,000 barrels. The quality of the Indiana apple crop this year is also superior, being rated at 92 as against 70 last year.



OFFICES OF STARK BROS. NURSERIES & ORCHARDS CO., Louisiana, Mo.

As many as 175 persons are employed during the busy season. The corner of Stark Brothers' printing plant can be seen in the rear. The landscape planting on the grounds of the home nursery office is made up of many hardy shrubs, ornamentals and roses flanked by California Privet and Japanese Barberry hedges. Umbrella Catalpa, White Birch, Schwedleri Maple and native willow are the trees used in this planting. A formal rose garden, planted this spring on the west side of the office building, does not show in the picture.



## SARCOXIE NURSERIES PEONY FIELDS

The growing season has been favorable and our Peonies are in excellent condition. The leading commercial varieties at attractive prices. Write for list and stock up now for the increasing demand

**WILD BROS. NURSERY CO.**  
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## NORTH CAROLINA PEACH SEED

The Kind that Produces Results

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Seed from Van Lindley  
and have no regrets

**J. VAN LINDLEY NURSERY CO.**  
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Lockhart, Alabama

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\$1.50 per year  
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### NO MATTER WHAT

Periodicals you are taking you cannot afford to be without "American Fruits" declared by leading Nurserymen throughout the country to be beyond question the most able and valuable Nursery Trade Journal published.

Twelve and one-half cents a month by the year.

## LITERATURE

One of the best nursery catalogues that has come to our desk is that recently issued by E. Turbat & Co., Orleans, France,—a veritable compendium of up-to-date approved varieties of European ornamental nursery stock. The first thirty-seven pages are devoted to roses which are modestly referred to as "one of our largest specialties." The lists constitute a directory of the rose. In the many pages which follow are listed such a variety of trees, shrubs, vines and plants that it would seem any want could be supplied. Some forest tree stocks are listed too; but another catalogue is issued by this company to cover fruit stocks. A table of contents makes reference to the various classes easy. Not all the species and varieties grown by this company are listed, but orders are accepted for nursery stock of French origin not announced. On the subject of freight to the United States E. Turbat & Co. say: "For this season it may happen that some of our American confreres may be afraid of ordering goods on account of there being an overcharge on freight tariffs. It is true that there is just now about 25 to 30 per cent. overcharge on sea freight tariffs but we beg our colleagues to consider that this overcharge will not be withdrawn at once when the war terminates, but will stand long afterwards for many reasons too numerous and too long to explain here."

The extract from the General Catalogue of Louis Leroy's nurseries, Angers, France, with price list for spring 1916, presents the usual large and varied array of fruit and ornamental stock carried by this company. The list is closely printed in small type and requires 120 pages. The company operates 500 acres of nurseries. In a communication to the trade it directs attention to ability to supply customers as usual, notwithstanding the war conditions which it says are such now that shipments can be made both by car and water practically as before. Prices are declared to be lower than usual due to lack of sale last fall and spring (1914-1915), but it is stated that prices must rise at the close of the war because of some nurseries having been abandoned. Mr. L. Levavasseur has been called to the colors, but the company assures the trade that it is quite able to execute orders.

The International Apple Shippers' Association has recently issued "Special Pamphlet 1915," containing valuable information for the carlot shipper, grower and packer. The pamphlet is compiled by the association's secretary, R. G. Phillips, and contains a large amount of valuable matter for reference.

The Leonard Coates Nursery Co., Morganhill, Santa Clara county, California, in its new catalogue offers the Holm oak, Quercus Ballota, bearing edible acorns, declared to be "sweet, good flavored as any good nut; tree very ornamental." The company says it procured this variety in Southern Europe and offers for the first time a few trees; also that it is testing several Japanese species of oak whose acorns are sweet and of delicate flavor.

**AMERICAN FRUITS PUB. CO., INCORPORATED**  
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If it relates to the Nursery Trade it is in "American Fruits."

Our Price List of  
**Ornamental Nursery Stock**  
Has been mailed to the trade. In case you did not receive it, send for it

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TO BE EFFECTIVE your horticultural printing and engraving calls for a knowledge of horticultural literature and practice as well as good printing and advertising; it also involves matters of a confidential nature.

Competitive salesmanship often involves taking sides, resorting to sharp practices, shaving quality here and cutting prices there.

Service that serves, and printing possessing force and character, demand sincerity, knowledge, aptitude, enthusiasm, imagination.

These elements are not in the competitive classes. When you feel that you are in the market for this kind of service, let us know. Correspondence invited.

1000 Original Photographs  
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Magnolia Grandiflora, Magnolia Fuscata,  
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We have a large stock of fruit trees, ornamental trees and shrubs

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### NOTICE

To all American Nurserymen and Seedmen desiring to keep in touch with commercial horticulture in England and the continent of Europe—Your best means of doing this is to take in the

### HORTICULTURAL ADVERTISER

Our circulation covers the whole trade in Great Britain and the cream of the European firms. Impartial reports of all novelties, etc. Paper free on receipt of 75 cents, covering cost of postage yearly. As the H. A. is a purely trade medium, applicants should, with the subscription, send a copy of their catalogue or other evidence that they belong to the nursery or seed trade.

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A & C. PEARSON, Lowdham, Nottingham, Eng.

### FOR SPRING OF 1916

We offer more than our usual supply of One and Two Year Apple Trees. We still have a large lot of Scions to offer. Write for prices. **JOHN A. CANNEDY NURSERY & ORCHARD CO.,** Carrollton, Ill.

## FRUIT TREES ROSES MANETTI STOCKS IN HEAVY QUANTITIES

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## S. SPOONER & SONS

The Nurseries—Established 1820

HOUNSLOW,

ENGLAND

# Tree Planting With Dynamite

During the spring of 1911, I set out a young orchard which covered 25 acres. In laying out the tract one row came exactly in an old road that was hard, barren soil. I could hardly dig holes here at all because of the extreme hardness of the ground. I did not wish to move the row to one side as that would spoil the symmetry of the tract. I decided to try dynamite for loosening up the ground.

I took a dirt auger and bored a small hole to a depth of 30 inches and exploded one-half stick of 40 per cent. dynamite in the bottom of it. It did not tear up the surface as I had expected it to do, but when I dug down to see what the effect was underneath, I was surprised to find the hard sub soil thoroughly pulverized to a distance of 1½ to 2 feet on each side. This seemed to be in excellent condition for my young trees, and I gave the other holes in the old road the same treatment. Then I was so well satisfied with the results that I decided to use dynamite for my whole tract, as I figured it would pay me well to loosen up all the holes so much better than could be done with any implement I had.

The results following this rather extensive experiment were extremely interesting in view of the severe drouth of 1911 to which the young trees were soon after subjected. Not one of the 1,250 trees was killed by the dry weather, although I had to replant about 25 that died from other causes. This, to me, is remarkable in the light of the fact that fully 50 per cent. of trees planted in this section during the spring of 1911 in spaded holes in fairly good ground, perished, while mine, even in the old road place, flourished. A prominent nurseryman who secured scions from my Delicious trees told me that the growth was extraordinary for that season.

I feel that I have already been more than repaid both in satisfaction and in a financial way for the expenditure of six cents per tree that I made for the dynamite, and certainly the returns are not yet all in. I have used dynamite in clearing fields of old stumps, boulders, etc., during a period extending over five years, but its use as a sub-soil pulverizer was new to me. In this role, however, it succeeded beyond my most hopeful expectations.

J. M. FIELD.

Climax, N. C.

## Fine Results in Texas

Editor American Fruits:

The season in Texas has been fine, plenty of summer rains, fine growth of stock, with a fine fall to handle it.

The campaign for diversification of crops rather than the "all cotton" regime of the past, is bringing fine results. The war scare of 1914 has blown over, or become reconciled, the financial conditions are greatly improved and still improving. On the whole nurserymen are pushing hard and faring well.

There is a spirit of optimism and better home conditions throughout the South with more or less of commercial orcharding which give expression in nursery planting to a good degree.

TEXAS NURSERY CO.,  
JOHN S. KERR.

Sherman, Tex., Nov. 22, 1915.

## New Nursery Storage Building

The McKay Nursery Company, Pardeeville, Wisconsin, have recently completed an addition to their storage building at their nurseries, Waterloo, Wisconsin.

The company now has a modern, frost-proof brick and hollow tile storage building 54 x 150 ft. The building has an overhead track system for the conveying of heavy boxes to and from all parts of the building and to the landing platform on the railroad side track.

In addition to this building and connected with it is their billing house 40 x 100 ft. The company is able with over 12,000 square feet of floor space to pack and handle all stock under cover conveniently and with despatch.

The lemon crop this year was the largest that California has ever had, and considerably more than double that of either of the two previous seasons, the total shipments this season being 6,851 cars, against 2,954 cars in the season of 1913-1914. The figures, however, do not exceed greatly those of the 1910-1911 season, when 6,764 cars were shipped.

Secretary A. P. Saunders, Clinton, N. Y., of the American Peony Society, has issued a Bulletin and the Proceedings of the Society for 1914-15, which includes a report on raising seedlings and expenses of members, some notes on recent exhibitions and a list of the members.

For first hand information on the iris, to date, the reader is referred to C. S. Harrison, York, Neb., whose "Manual on the Iris" will answer any question.

Apple and Peach Growers in West Virginia, is a valuable bulletin of the West Virginia Dept. of Agriculture, Howard E. Williams, commissioner.

## Literature

American apple shippers are advised to stimulate the demand and increase their shipments to Latin America and the Orient. It is suggested that by cooperating with the Department of Commerce, extension of trade in this respect can be accomplished. Inquiries relating to these countries should be addressed to the Bureau of Foreign and Domestic Commerce, Washington, D. C. Shippers are urged to apply to the Superintendent of Documents, Government Printing Office, Washington, D. S., for the following publications, issued by that bureau, which may be secured at the prices shown: Special Agents Series, No. 62, 30 cents; No. 72, 30 cents; and No. 81, 25 cents; Special Consular Reports, No. 62, 10 cents; and Tariff Series, No. 19a, 5 cents.

In the revised edition of "Principles of Fruit Growing" Prof. L. H. Bailey cites the two types of commercial fruit growing—that which aims at a special or personal market, and that which aims at the general or open market. The ideals of these two types of fruit-growing are very unlike. The methods and the varieties that succeed for the one may not succeed for the other. The grower for the special market provides a product desired for its intrinsic qualities and usually works on a small base. The man who grows fruit for the world's market has no personal customer; he works on a large base. Prof. Bailey directs attention to the fact that it is the large base on which American fruit-growing is established that enables it to enter European markets. The contrasting of American and European methods is only one of hundreds of valuable features of this standard work on Commercial Orchardring. It would be difficult to imagine a condition confronting the fruit grower, in any section, which this book does not consider. It covers the entire gamut, from nursery stock to packing and selling methods. It should be in the library of every fruit grower. It is fully illustrated and closely indexed for easy reference.

A highly interesting bulletin is that issued by the Dept. of Agriculture of the State of New York on "Agricultural Organizations in European Countries," the result of a visit by former Commissioner of Agriculture Raymond A. Pearson to fifteen European countries. The subject matter is profusely illustrated with engravings from photographs taken by the author.

Recent bulletins from the U. S. Dept. of Agriculture are "The San Jose Scale and Its Control," by A. L. Quaintance, and "The Control of Root-knot," by Ernest A. Bessey and L. P. Byars.

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ONE OF THE GRAND TRAVERSE FRUIT COMPANY ORCHARDS, EMPIRE, MICH.  
250 acres; Peaches, Apples, Cherries. 1 and 2 year trees after planting



## American Nut Groves—"American Fruits" Series

### Northern Nut Growers' Association

#### Nut Contest 1915

In the interest of science and of American horticulture this association is trying to find, and to preserve by propagation, the fine and valuable nut trees of this country.

To this end the association offers this year the following prizes:

\$50 for a native American hazel that is good enough to compete with the imported hazel, or filbert. The sender must be able to prove the identity of the bush from which the nuts come, if possible by leaving some of the nuts in place on the bush. No prize will be awarded if a nut of sufficient merit is not sent in.

\$25 for a shagbark, or other hickory except the pecan, that shall be considered by the judges superior to the few varieties now being propagated.

\$10 for a northern pecan, better than those now being propagated, that is native to Iowa, Indiana, Illinois, Ohio or other northern state.

\$5 each for the best black walnut, butternut, Japanese walnut or any other northern nut, if of sufficient merit.

Prize winners must furnish one lot of scions, or cuttings, for experimental propagation at the request of the association. With this exception prize winners, and senders of good nuts not prize winners, will probably find opportunity to sell cuttings at the usual rate of five cents a foot.

In addition to the prizes and the opportunities to sell cuttings, valuable varieties receive the name of the person sending them, and this goes on record permanently.

The receipt of all nuts will be acknowledged and a written opinion as to their value expressed by the secretary.

Send a dozen nuts, or more, from each tree

that is to enter the competition, and mark the tree well so that no mistake can be made if cuttings are to be sent.

Send the nuts by mail in a box, or better a bag, containing a slip with the name and address of the sender plainly written.

It is requested also that a letter be written separately describing the tree in a general way, its age, size, location, amount of crop and whether an annual bearer. But send the nuts anyway with name and address.

This competition closes January first 1916.

Send the nuts and all correspondence to Dr. W. C. Deming, Secretary, Georgetown, Connecticut.

### Walnuts in Oregon

In a helpful address before the newly organized Western Walnut Growers' Association last month, Prof. C. D. Lewis, Corvallis, Ore., gave timely advice pertaining to the problems before the association, as presented in another column of this issue of the *Journal*. In his opinion the next ten years will see a tremendous increase in the output of this valuable food product, and Oregon will have a large part in that work. He says:

The most encouraging fact concerning English walnuts is that the consumption of this food product in the United States during the past ten years has practically doubled. Ten years ago, we were raising somewhat over 10,000,000 pounds; the last census gives us 22,026,524 pounds. In 1902 we were importing over 12,000,000 pounds, while in 1912 we were importing from 26,000,000 to 37,000,000 pounds. It has been said by some that we will have less and less for-

eign competition. I hardly know upon what facts such statements are based, since the imports have increased, if anything, faster than the home production. It would not be safe for walnut men to feel that they have no competition. The pecan, filbert and almond all enter into some competition against the English walnut. However, it should be a very easy matter to encourage the American people to use more nuts in their diet; in fact, they are already doing that without any special effort on our part.

Prof. Lewis urges the members of the association to try out as many kinds of stocks as may be had for propagation.

C. A. Green, Rochester, N. Y., says: "There is no doubt that the Persian walnut will flourish in good soil in Connecticut and elsewhere in New England. I have just been there to look at trees of this nut and others and saw many kinds doing very well. There is good reason to expect the success of the hardy varieties there. The trees will not grow so fast as they do in the Pacific States, but they will bear at reasonable age and pay reasonable profit on the outlay if wisely handled."

D. I. Haralson, Goldthwaite, Tex., who has been handling pecan shipments from that point for twenty years, says express shipments have been the most satisfactory way of disposing of the nuts. During the last year the Wells-Fargo Express agent at Goldthwaite, J. M. Arnold, did a pecan business amounting to 18,000 pounds of which 7500 pounds went to Chicago, 10,000 pounds to Houston and the rest to points all over the country.

Have you your copy  
American Fruits  
Directory of Nurserymen?  
1915 Edition

Just say you saw it in AMERICAN FRUITS.

## Chestnut Trees for Nurserymen

In a few years nurserymen will be propagating chestnut trees in large quantities to supply a demand which is now being created by some of the progressive nurserymen of the country.

Eighteen years of specializing enables the undesigned to propagate successfully in great quantity the

### Sober Paragon Chestnut

Sweet as the native  
nut and much larger

Bears second year from graft. Commercially profitable in five years. Commission men's demand is ten times stronger than the supply, and increasing.

Let me bear the burden  
of propagating worries

I will supply the stock if you will sell it. Have 300,000 prime grafted trees and many more coming on. Sober Paragon nursery stock brings highest prices. Prominent nurserymen are taking it now. Write at once for particulars. Can ship promptly.

C. K. SOBER, Lewisburg, Pa.

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American Fruits Publishing Company, by special arrangement with the publishers, offers this work on easy terms. Six large quarto volumes. More than 3,600 pages. 24 full page exquisite color plates. 96 beautiful full page sepia halftones. More than 4,000 text engravings. 500 Collaborators. Approximately 4,000 genera, 15,000 species and 40,000 plant names. Vols. I, II, III now ready.

The new Standard Cyclopedia of Horticulture has been freshly written in the light of the most recent research and experience. It is not merely an ordinary revision or corrected edition of the Cyclopedia, but it is a new work from start to finish with enlarged boundaries geographically and practically; it supersedes and displaces all previous editions or reprints of every kind whatsoever. It is both an Encyclopedia and a Manual, for with the aid of its Synopsis and Key, amateur and professional alike may quickly identify any plant, shrub or fruit contained within the set, and then receive expert instructions for its cultivation.

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Containing complete description. Everything newly written, up to date and beautifully illustrated in colors and sepia.

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# What Ornamental Nursery Stock is Doing

CALIFORNIA CONDITIONS—Prof. J.W. Gregg, University of California

If the nurseryman is sincere in his efforts to determine all the conditions upon which the proper selection of plants depends, he will, among other things, become acquainted with the soil and climatic characteristics of the divisions or plant zones of the state.

The nurseryman is "the man behind the plant," so to speak, and as such is indirectly if not almost directly responsible for much of the landscape effect produced by his stock. If he persists in growing large stock of common, poor varieties simply because they are easily propagated and of rapid growth, he is retarding in the great majority of cases the progress that might be made towards creating variety and individuality in our California landscapes.

It can be stated that, as a rule, the easily propagated, quick growing material looks attractive when young and possibly fulfills the desire on the part of the purchaser for quick effects, but is short lived or soon becomes most scragly and eventually proves a disappointment to the purchaser and a boomerang to the nurseryman, or landscape gardener who had to use it because better varieties were not available in the quantity desired. On the other hand, the slower growing varieties or those a little more difficult to propagate are, as a rule, longer lived and capable of maintaining a better appearance over a greater period and in the end give greater satisfaction all around. Of course, there are exceptions to these rules, we know, and we have many good old standby varieties that no one wants to see discarded, but nurserymen should throw out more of the

undesirable varieties and replace them with better ones. The carnation grower or the rose grower is quick to discard an old variety for a new one that has proved to be better, and he finds such practice profitable. Why should not the nurserymen pursue the same policy? At this point, however, the nurserymen may ask, why should we stop raising varieties that people call for and that we can raise cheaply and sell at a good profit? and I reply that just so long as poor varieties are propagated and grown in large quantities, just so long will people be in ignorance concerning anything better, just so long will they buy and plant the common run of varieties, and just so long will larger quantities or poor stock have to be grown to provide the same amount of profit a smaller amount of better stock would produce.

But the nurserymen will say further I have a small stock of some of the better things but can't sell them. The people will always take the old varieties. Of course, they will just so long as they see your nursery full of that class of stock, the very amount of it alone tending to prove to them that it is the most used, therefore must be the best and you have not the backbone to say, "No! we don't raise that variety any more, it's no good, here is what we are growing and selling in now in its place." They will buy it, or perchance they do go to some one else, still seeking what they want, and they hear the same story, they will soon be convinced that the newer stock must be the best. Some of the better varieties may cost you more to raise and you will have to charge more, but we know the American peo-

ple will pay the price if they know they are getting their money's worth.

believe further in specialization. I know, as you do, that some nurserymen can by reason of their knowledge, practical experience, and location grow some things better than others. Why not grow some few things well rather than a miscellaneous assortment poorly? When too many varieties are grown there is a tendency to neglect certain definite requirements necessary to produce the best plants. As a result, many varieties are stunted while others produce too rapid growth, to the extent of becoming tall, spindly, weak and devoid of lower branches. On the other hand, the root system, because it is the part of the plant least seen, gets least consideration, with the result that the most important part of the plant is restricted in its growth because of unfavorable conditions of soil and treatment. Ornamental nursery stock should be given more room in the nursery and more individual care with reference to soil, watering, shading, transplanting, and resting, if such stock is to produce its maximum landscape value in form, habit, texture, and color, four very important qualities, which the landscape man considers most carefully in selecting varieties.

W. W. Thomas, aged 44, died Nov. 13, at Anna, Ill., of typhoid fever. He was a leader in southern Illinois politics and was prominent in Masonic circles, being a member of the Mystic Shrine, East St. Louis, Ill. As a strawberry plant grower he was said to be the largest exclusive nurseryman in the world.

Just say you saw it in AMERICAN FRUITS.

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Large Quantities for the Coming Season's Trade

Heavy Vines for Retail Trade

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Your customers demand superior trees and plants—We have them—A complete assortment of both fruits and ornamentals.

### EXTRA FINE STOCK

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**Hydrangea**—Arborescens Grandiflora

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**Pot Grown Evergreens**—We ship them with pot ball attached. They will transplant as readily this fall and next spring.

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Nurserymen and Rose Growers

ORLEANS, France

Inform the whole Nursery Trade that notwithstanding the war they have maintained their Nurseries up to the usual level and that they will be from now very pleased to answer all demands for:

**Roses** one of the most extensive existing collections, deliverable as **dwarfs**, on their own roots; grafted on dog rose roots; budded on dog rose seedlings; in all the best Old and New varieties; also as **Standards** or **Tree Roses**.

**Rose Stocks** such as **Rosa Canina**, of which we have largely increased our production; **Manetti**, **Grifferaie**, **Laxa**, **Multiflora**, **Polyantha**, etc.

**Fruit Tree Stocks** all varieties, all sizes.

**Young Deciduous Ornamental Trees and Shrubs**, very important collection.

**Young Conifers**, very large collection, all the best sorts. New Rare or Noticeable **TREES** and **SHRUBS**, the most up-to-date list published of deep commercial interest to be consulted by all interested.

Grand List **HARDY HERBCAEIOUS** New and Old, etc.

Our new **WHOLESALE** catalogue is ready. Please ask for it.



## Grape Vines

If you are in the market  
for fancy stock I have it

**Concord, Moore's  
Early and Niagara**  
in large quantities  
**Fairfield Nurseries**  
(CHAS. M. PETERS)  
**SALISBURY, MD.**

**MANEY & SAYRE, Inc.**  
**Wholesale Nurseries**  
**GENEVA, NEW YORK**

We will have for the Spring of 1916 an extra fine lot of Apple, Cherry, Plum, Pear, Apricot, Peach, Currants, Roses, Barberry Thun., Cal. Privet, Hydrangea P. G. Also Bud Sticks and Currant Cuttings. Get our quotations before placing your order.

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In choice young ornamental Nursery Stock for transplanting lining out, or mail orders? If you are, get next to our Trade List of genuine bargains, in Oriental Planes, Nut Seedlings, Oaks, Ash, Catalpa Speciosa, Honey and Black Locust, in large quantities, besides hundreds of other varieties, both deciduous and evergreen. Peach Trees Dahlia Bulbs, etc., etc.

**ATLANTIC NURSERY CO., Inc.**  
**BERLIN, MARYLAND**  
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1200 Acres  
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100,000 transplanted raspberry, blackberry and dewberry plants for retail trade. See wholesale list before placing your order.

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**Fruit Tree Stocks, Forest Tree Seedlings, Rose Stocks, Shrubs, Vines and Conifers for Nursery Planting**

Information regarding stock, terms, prices etc. may be had on application to Mr. Detriche's sole representative for the United States and Canada:

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## COMING EVENTS

Arkansas Hort'l Society—Fort Smith Dec. 7-10.

American Association Nurserymen—Milwaukee, Wis., June 21-23, 1916.

Kansas Horticultural Society—Topeka, December.

Michigan Horticultural Society—Grand Rapids, Dec. 7-9.

National Orange Show—San Bernardino, Cal., Feb. 17-24, 1916.

New Jersey Horticultural Society—Freehold, N. J., Dec. 1-4.

New York State Fruit Growers—Rochester, N. Y., Jan. 5-7.

Southern Iowa Horticultural Society—Atlantic, Ia., Dec. 1-3.

Virginia Horticultural Society—Charlottesville, Jan. 12-13, 1916.

Western Association Nurserymen—Kansas City, December 8-9, 1915.

Western Washington Fruit Growers' Association—Olympia, Wash., Feb., 1916.

Western Fruit Jobbers' Association—Memphis, Tenn., Jan. 16-20, 1916.

West Virginia Horticultural Society—Morgantown, W. Va., Jan. 5-6.

Western New York Horticultural Society—Rochester, N. Y., Jan. 26-28.

### Dressing Tree Wounds

A recent circular describing tree fillings and wound dressings for orchard and shade trees by A. D. Selby of the Ohio Agricultural Experiment Station says in part:

Asphaltum and Sawdust Filling for Cavities.—The difficulties arising from the use of cement in filling cavities in orchard or shade trees are largely traceable to the rigid character of cement filling. The light color is at times likewise an objection to cement as a material for such fillings; it also lacks adaptability for use in swaying branches. For these reasons and others we have looked with favor upon the formulae for asphaltum and sawdust fillings, first originated and tested by John Boddy, City Forester, Cleveland, O. The details briefly stated are as follows, all materials being designated by volume:

Materials.—Dry sawdust of any variety, and solid asphaltum, such as "Byerlyte" and that used for fillings in brick pavements.

For part asphaltum to three to four parts sawdust. Moisten tools in Varnolene or possibly in crude oil.

For Cavities in Trunks—One part asphaltum to five or six parts of sawdust. Moisten tools with Varnolene or crude oil. Stir sawdust into hot melted asphaltum until desired consistency is reached. Distribute sawdust, as added, evenly over surface of vessel to avoid boiling over. Apply in cavities while still hot. No joints or sheet paper separations are required as in cement fillings. If surfaces of fillings are irregular or lack uniformity of color, coat them with gas tar or liquid asphaltum.

### Demand For Orchardists

Trained orchardists are in great demand in Oregon and in other states. Of 21 graduates of horticulture at the Agriculture college last year five are members of the O. A. C. staff, one is assistant at the Southern Oregon experiment station, two are instructors in eastern universities, one is school landscape gardener of Alameda county, Cal., four are managers of departments in large commercial orchards, three are graduate students at O. A. C., two are managers of the home orchards and three are owners of large orchard and garden tracts. Although attractive salaried positions were offered most of the graduates not thus employed, the positions were declined in the belief that further study or working for themselves is more profitable than working for salaries.

The street trees of Paris number 86,000, 26,000 being planes, 16,000 chestnuts, and 14,000 elms.

"You are issuing a splendid Journal, covering the news of the trade from coast to coast."—E. S. WELCH, President American Association of Nurserymen.

Just say you saw it in AMERICAN FRUITS.

## Portland Wholesale Nursery Co.

Rooms 6 and 7, 122 1-2 Grand Ave.  
**PORTLAND, ORE.**

Wholesalers of  
**Nursery Stock and Nursery Supplies**  
A very complete line of Fruit and Ornamental Trees, Shrubs, Vines, etc.

**SPECIALTIES**  
Clean Coast Grown Seedlings, Oregon Champion Gooseberries and Perfection Currants

Write now



**Are You Looking Ahead?**  
**Plant Pure Bred Franquette WALNUTS**

Biggest future money-making trees you can plant, and require the least care. We are the exclusive growers of this hardy superior strain and largest Walnut tree growers in the world. Write for literature and prices.

**OREGON NURSERY COMPANY,**  
**ORENCO, OREGON**

### "How to Grow Roses"

This little book, of 36 pages, was declared by Bishop Mills, before the audience assembled at Cornell University during Farmers' Week, to be "the best thing of the size I have ever seen." Price 10c. Single copies will be sent to members of the trade who mention American Fruits.

**The Conard & Jones Co.**

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## \$5 Nursery Directory for \$1

Only exclusive Nursery Directory published. Every State, Canada and Foreign. Based on official sources. Revised to date.

"Worth \$5.00 of any man's money."  
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Can be supplied either plain or  
printed, with Iron or Copper wire  
attached in any quantity.

Our facilities for handling your  
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Samples and prices are at the  
command of a communication  
from you.

**DAYTON FRUIT TREE LABEL CO.**

**DAYTON, OHIO.**

Just say you saw it in AMERICAN FRUITS.

## Foreign Oaks in America

Several of the oaks of eastern Asia are established in the Arnold Arboretum, including all the species of northern Japan, eastern Siberia, northern Korea and northern China. In addition to these there is a large collection of young plants raised from Wilson's seeds collected in western China. These are growing rapidly and appear to be perfectly hardy, but their relationship and names have not yet been determined. There are many evergreen oaks in southern Japan and southern China, but none of these are hardy in our northern states where only the species with deciduous leaves can be grown. These all belong to the White Oak Group, that is they are species which mature their acorns in one season, all the Black Oaks, which require two seasons for the development of their fruit, being found only in America. There are six Japanese Oaks in the Arboretum; the largest and most valuable of these are *Quercus grosseserrata* and *Q. crispula*. These two trees under favorable conditions sometimes grow in Japan to the height of one hundred feet and produce trunks from three to four feet in diameter. In central Hokkaido these trees form a considerable part of the forest growth and their abundance and the value of the timber which they produce has already attracted the attention of American lumbermen, and it is probable that Japanese white oak timber will become a considerable article of import into the United States. The next species, *Quercus glandulifera*, is perhaps the most widely distributed oaks of Japan and the common species of the high mountains of the central island at elevations over three

thousand feet. This is a small tree rarely more than thirty or forty feet tall which sometimes begins to bear acorns when not more than a foot high. The small leaves somewhat resemble those of one of the American Chestnut Oaks. Two Japanese Oaks with narrow leaves, in general outline like those of the chestnut tree, both hardy here, are interesting on account of their peculiar foliage; the larger of these two trees, *Q. variabilis*, sometimes reaches in Japan the height of eighty feet with a trunk three or four feet in diameter. The under surface of the leaves is silvery white and the bark is thick and corky. This tree is rare in Japan and possibly has been introduced there from China; it is common in Korea and in northern and central China. The bark is sometimes used as cork and the large, thick cups of the fruit are used in the preparation of a black dye and are sold in Chinese markets in large quantities. *Quercus serrata* is a smaller tree with darker bark and the leaves are bright green on the two surfaces. The fifth Japanese Oak in the collection, *Q. dentata*, is remarkable for the great size of the leaves which are often a foot long and eight inches broad, obovate in outline and deeply lobed, and for the long, narrow, chestnut brown scales of the cup which nearly encloses the small acorn. This is a common tree on the mountains of central Japan and ranges far northward and to northern and central China, and, although it grows sometimes to a large size, it is rarely a handsome or picturesque tree. The dark thick bark is used in tan-

ning leather. There is a variety (pinnatifida) in the collection with deeply divided leaves.

F. H. Hall in a New York Experiment Station bulletin says:

Rarely do experiments in agriculture disprove commonly accepted beliefs; this has been the result from a four-year investigation at this Station on the effect of various protective materials on the wounds of fruit trees due to pruning. Though many materials were used in the test none was found to be of benefit; for in every case untreated wounds made as good recovery as those covered. In nearly all instances the supposedly helpful covering injured the exposed tissues and retarded healing; the mechanical exclusion of the germs of plant diseases by impervious coverings and the destruction of these germs by preservatives and disinfectants proved without value; while wounds kept from drying out by some protective material healed no more rapidly than those left open to the air.

In no case was there benefit from the use of any of the coverings. On peach all were so harmful that it may be safely said no covering should ever be used on trees of this, or, presumably, of any stone fruit. The injury from shellac was only slight. On the apple the *avenarius carbolineum* was very harmful, the yellow ochre paint retarded healing noticeably and destroyed some tissue, the white lead and white zinc were less injurious and the shellac did little or no harm but no good.

Dr. H. J. Webber, director of the University of California, it is announced, has produced a cross between the orange and the tangerine which is called the tangelo. It contains seeds but is said to be of excellent quality.

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**Livest In Middle West**

In his address at the opening of the annual meeting of the Indiana Horticultural Society in Indianapolis, President William M. Walton, Laporte, said:

This society is the livest institution for the advancement of horticulture in the Middle West. This is no vain boast but a well demonstrated fact, for Indiana has been making wonderful strides forward in the last few years, and this society has been no small factor in that movement.

Through all its fifty years of existence it has ever stood for better fruit and honest dealing, but I doubt if there was ever such an awakening as we see at present. Indiana has demonstrated to the world that she can produce the fruit of quality at lower cost than most states and with her excellent market facilities there is no wonder that we have been able to see the increased interest in the industry and the desire for improvement.

The Indiana apple show has been responsible for placing the state in a better light along lines of fruit production, and we are now beginning to reap the benefits through better fruit and easier sales. While the society has put considerable efforts on the apple show, it does not necessarily mean that the apple is the only profitable fruit for our production. All fruits adapted to this climate do remarkably well and Indiana growers should strive to expand their business. There is no reason why those with the proper knowledge of the fruit industry should not treble their average and production.

We have the soil, the climate, and the demand for high grade fruit and it is for the purpose of installing new vigor and knowledge in the efforts of the grower that these meetings and exhibits are held each year.

**Apple Facts for Nebraska**

1915 crop equal to combined crop of Utah and Idaho.

1915 crop as large as Oregon and Utah together.

1915 crop greater than Colorado and New Mexico together.

Nebraska sixteenth in apple production in the United States, being surpassed only by older apple states, like New York, Ohio, Pennsylvania, Michigan, Virginia, Iowa and Illinois.

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Present acreage of Nebraska apple orchards, if given the best of care, is capable of producing twenty million bushels of apples.

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Apple orchards average forty trees per acre. A well-cared-for tree will average from five to ten bushels per tree during a ten-year period. Prices to growers for well-grown apples range from 40 cents to \$1 per bushel.

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## Prof. H. E. Van Deman—The Man

ROBERT SPARKS WALKER, Chattanooga, Tenn., President Tennessee Horticultural Society.

**H**ENRY E. Van Deman who died at his home in Washington, D. C., on April 28, 1915, was such a great benefactor to humanity that more than a mere obituary notice should be published about this great man.

For the last half century he has been devoting his entire time to horticulture, and aside from a few years serving as an instructor in a college, his work has been given over to practical horticulture.

Prof. Van Deman was a man of fine character, a Christian gentleman and one of the most congenial men I ever knew. He was always striving to better humanity, and the horticultural world has certainly been blessed by his life. He was always optimistic, and his greatest pleasure, as attested by his thousands of contributions to the horticultural press, was in giving his fellow man the advantage of his experience and the result of his experiments. There was not an atom of egotism in his personality, but he was a man, and his simple life, and his sweet humility contributed to his greatness.

On a late visit to my home, I asked him to write me a brief biographical sketch of his life, which I felt some day would be a very interesting story for his many friends and admirers. I quote from his letter as follows:

### Born 1845 in a Log House

"I was born November 3, 1845, in a log house in Rose county, Ohio, that my grandfather built in the early days on the old farm and among my first recollections are the apple orchards that he planted. These were big trees then, some 68 years ago, for he was an old soldier of the American Revolution and came West from Pennsylvania directly after that long and cruel war, through which he served from first to last. He settled in the great forest where timber was the most abundant of anything, and he spent all the rest of his life in destroying it to get open land on which to grow farm crops and fruits.

"In those days they grew apples to make into brandy, chiefly, and I remember the remnants of the old distillery where he, and his sons after him for a time, made the fruit of the orchards into 'apple jack.' But my father was disgusted with the liquor business and when he took charge the distillery was soon abandoned. He kept farm account books, made of plain paper by his own hands, and in them are records of the sale of apples at \$2 per wagon load for 'Picked winter apples', and \$1 per load for 'common apples.' These were trees of those old apple orchards of my grandfather's planting and it was in them that I first learned what good apples are. There was the Fall Pippin, Golden Russet or Bullock, the Yellow Bellflower, Genet (Ralls), Roxbury Russet and a few others of the varieties that are standards today. It was thus that my love for good fruit was not only born in me but nurtured in the apple orchards of my ancestors by gathering and eating the fruit.

"My mother had an old-fashioned paled-in garden in which she grew vegetables for the family and the loveliest of flowers as well, such as the Easter lily, Peony, jonquil, phlox and the dear little pansy called 'Johnny-Jump-up.' Although she left us for the world beyond when I was a mere child, I can well remember the tender care she gave all these things and the apple dumplings, and pies she made from the products of the orchards.

### Learned to Bud at Ten Years Old

"In the years that closely followed my mother's death my father moved to another place and there he planted orchards of the choicest fruits that were then known and among them were the Tompkins' King apple, then a great variety; the Seckel pear and the Crawford peaches, early and late. These I learned to bud when I was not over 10 years old and surprised my father in producing trees equal to those he got from the nurseries at Rochester, New York. We had the best berries and grapes of that day and the neighbor boys used to come to help me enjoy them. I remember the delicious Catawba we got by climbing to the

porch roof and by reaching out of the upper windows.

"When the Civil war came on I was yet a boy, but I persuaded my father to let me leave school and enlist in Co. A. of the 1st Ohio heavy artillery in June, 1863. When this terrible time had passed over and I came home in the summer of 1865 a year more was spent in school, studying Latin, Greek and higher mathematics that was a practical waste of time and effort. At least I thought so, for I decided in 1866 to take up practical horticulture for a life work. Therefore I laid aside this class of books and bought a copy of 'Woods Botany,' which I studied with deep interest and endeavored to analyze and name every tree and plant about me.

"Just at this point I was fortunate in meeting one of the foremost pomologists of that day, Dr. John A. Warden of North Bend, Ohio, at a local fair where he was judging the fruit and to him I confided my recent decision and asked his advice about getting a place to work for some good fruit grower to learn the business. There were no agricultural colleges in those days where a scientific education was obtainable and this seemed to be the quickest and surest way to get what I needed, although we had a good farm and I might have dug out some sort of horticultural education at home. The conference with Dr. Warden resulted, finally, in spending two of the happiest years of my life working for this kindly and well informed old Quaker. I plied him with questions and on rainy days and at night I studied the old book in botany, but got the most of my practical knowledge in the orchards, vineyards and berry patches at hard work. Now and then I had spells in the variety orchards with my preceptor, with record books, and baskets, studying the new kinds and there I first saw and tasted hundreds of them, some of which have since become standards of excellence and world-wide favorites.

### Organized U. S. Division Pomology

"A brother having gone to the woods of Northern Michigan to build a house there I spent two years helping him. The roughest of pioneer life was experienced, far from the conveniences of even that day, but it had its pleasure, and taught many useful lessons. There are today growing in that region many orchard trees on my brother's place on the shore of beautiful Crystal Lake and on the neighbor's farms that I planted over forty years ago in the clearings in the woods.

"In the spring of 1871 I took a Government homestead claim in Kansas and began pioneering on the prairies, in true bachelor style. There was a siege with drouth and grasshoppers during 1874 and 1875 that destroyed twenty acres of apple orchard that I had planted and almost everything else of a horticultural nature. But these discouragements did not keep me from going ahead and they were all replanted and more set out until I had about forty acres in trees and vines. I was married in 1876 and our two children, a son and a daughter, were born on the Kansas farm. It was my purpose to stay there permanently.

"But without any previous notice I was called to fill the chair of botany and practical horticulture in the Kansas Agricultural

College, which I accepted with considerable reluctance and only kept during 1878-9. I did not abandon the farm or take my family away from it and went back to it with greater determination to lead the private life of a fruit grower. But this I was not allowed to do for there was an urgent call to go to Washington, D. C., and organize the Division of Pomology in the U. S. Department of Agriculture. This was in 1885, the thought of the establishment of pomology as a part of the work of the Government having originated with me while exhibiting fruit from Kansas at the New Orleans Exposition. For over two years I kept my family on the farm as it seemed too great a sacrifice to leave it for public life. The main reason for finally giving it up and devoting my energies to official work was the hope of doing more good to the cause of horticulture than the farm afforded. For eight years I worked with all abilities I possessed to further the cause of practical and scientific pomology when a disagreement with the narrow-minded administration of the new secretary of agriculture severed my relations with the Government service.

### Introduced Mangoes and Dates

"During the year that I was pomologist of the United States Department of Agriculture I instituted the work of investigating the fruit industry of the entire country. I invited the sending of specimens of old varieties of fruit for identification and this soon grew to be one of the most useful lines of work that has ever been instituted by the department. Varieties were compared and examined for their suitability to the different localities and conditions of soil and climate and these facts were published from time to time.

"New varieties were sought out and put before the public for trial and in some cases those that were not worthy were condemned and warning given that discouraged their planting. At that time there was no organized means of searching for and introducing valuable varieties from foreign countries but my desire to secure such things caused me to study the literature on foreign fruits and to send to many parts of the world for such kinds as might prove worthy of introduction. One of the most widely grown fruits in the world is the mango, for there are many millions of people in India alone who eat it very commonly and as it is grown and eaten in all tropical countries it is safe to say that more people eat mangoes than apples. It is also one of the most delicious and healthful fruits that grow anywhere. And as there is a region in Southern Florida where the mango will grow successfully it was of my efforts to secure from India grafted trees of the choicest varieties, which was accomplished in 1889 by the arrival of several trees each of 8 varieties. They were sent to Southern Florida and planted as far South as transportation was then available and all grew for several years and until a slight freeze killed all but one tree. This happened to be a Mulgoba, which is one of the choicest of all mangoes and the old tree now stands at West Palm Beach, a monument to the effort to plant the choicest fruit of the old world in the new. And

Continued on Page 162

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## INSECTS AND DISEASES

It has been estimated that the losses in the United States resulting from the codling moth alone amount to sixteen and one-half millions of dollars annually. The San Jose scale causes ten and one-half millions of dollars of damage. Miscellaneous injurious apple insects cause ten million dollars in losses each year, grape insects nearly nine million. The total damage and loss in one year resulting from all fruit insects amounts to \$66,114,650. This sum includes cost of spraying and other repressive measures for the control of fruit insects.

The Parandra borer is an insect which can do very little harm to fruit and other trees as long as they are sound and vigorous, but which is quick to take advantage of any injury to complete the work of destruction. Orchardists are, therefore, recommended in a new publication of the United States Department of Agriculture, Bulletin No. 262, to keep their trees free from all exposed dead surfaces.

The American plum borer, an insect which attacks impartially plum, cherry, peach, and apple trees, has been found by investigators of the U. S. Department of Agriculture, to confine itself entirely to those trees which have received some previous injury. It is, it is said, entirely unable to establish itself upon vigorous, healthy, uninjured trees and for this reason, except in occasional cases, is unlikely to become a pest of more than ordinary importance. It is frequently found, however, on apple trees which have suffered from collar blight.

A constant source of danger to apple trees lies in cankers of various kinds, which, persisting from year to year, if left uncared for, may in time cause the death of a large limb or a tree. Through its experiment station, the New York state college of agriculture has just issued a circular dealing with this problem.

In New York state, injury by frost is the main predisposing cause of canker, says the circular, and in severe winters such varieties as Tompkins King, Twenty Ounce, and Hubbardston, as well as some others that are normally less susceptible to the disease, may be seriously affected. Other forms of cankers, known respectively as New York apple-tree canker, fire-blight canker, European apple-tree canker, and Illinois blister canker, are fungous diseases affecting bark or wood on the trunks or the branches of trees.

The only effective means of controlling these cankers, say the authorities, is by removing the diseased bark or cutting the affected limb from the tree. The cutting should be done very carefully and the resulting wound should be covered with a dressing, not so much for the purpose of hastening the healing, but to protect the heartwood from decay while the new tissue is being formed.

A Directory of the Nursery Trade, revised monthly—"American Fruits Magazine." Is it on your desk?

## EVERY NURSERYMAN SHOULD BECOME A MEMBER OF THE NATIONAL ASSOCIATION

Our present membership is less than five hundred, and before the meeting at Milwaukee it should be one thousand. Every reputable nurseryman in the county should become a member of American Association of Nurserymen NOW. He owes it to the trade, to the common good, and HE OWES IT TO HIMSELF. Our new plans are builded on CO-OPERATION, and the nurseryman who joins hands with the organization, puts his shoulder to the wheel and does his part, will receive benefits far in excess of the cost to him in dollars and cents. Let our aim be to make the National Association the most efficient possible working organization, serving the nurserymen of America in whatever way the future may direct, making all state and district organizations auxiliary thereto, and my conviction is that before many years have passed the nursery interests of America will rank with other industrial enterprises. One thousand men working to a single purpose can accomplish results where five hundred will fail, therefore my plea to all nurserymen is to become active, aggressive members of the National organization.

May I again say that the thing most needed at this time is the co-operation of every nurseryman, whether doing a business of \$50,000 per annum or a business of \$5,000. What the Executive Committee shall strive for is to make nursery products worth one hundred cents on the dollar, to stabilize nursery products, if you please, and thereby to make the nurserymen a more prosperous and happy people. With this laudable aim in view, is there any reason why a single reputable nurseryman should withhold his support? Join the Association today and begin a campaign of boosting. As Executive Committeeman from the Southwest, I intend to personally extend to every worthy nurseryman in my territory an urgent invitation to join forces with the American Association, and I hope every other committeeman will do the same.

## CRITICISM OF REORGANIZATION

As was expected, some of our friends who were not present at the Detroit meeting are criticising the "precipitate" (?) action of the convention in adopting such progressive amendments to the constitution. This criticism is good, for if the plan will not withstand fair and unprejudiced criticism it is worthless. Let us remember, however, when we sit down to write a criticism of the Convention's new constitution three things: First, that everyone who had given any thought to the question was in accord on one proposition, i. e., that something was needed, that the association was marking time. Therefore, when this plan for reorganizing was presented, IT WAS THE ONLY THING BEFORE THE CONVENTION. Second, that a committee of twelve men was selected to go over the whole plan and make a report to the convention the day following. This committee of twelve men labored many hours over the new constitution and by-laws and made to the convention a unanimous report that the constitution as reported be adopted. Third, after hours of discussion where every phase of the new plan was criticised, and after each section of the constitution was read and re-read—"line upon line, and precept upon precept"—the report of the committee was adopted by practically the unanimous vote of perhaps seventy-five per cent. of the 1915 membership, and the new constitution became the organic law of the American Association of Nurserymen. With these facts before us, may we not accept the plan that has been worked out for us, give it an honest trial, and, if it needs further amending, which it will, let this be a matter for future consideration. To be sure, it is not perfect and it may not be as near perfect as it would have been had its framers been different men, but it was the best that this committee was capable of and is worthy a fair and impartial trial.

J. R. MAYHEW.

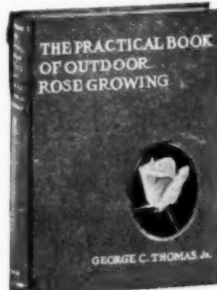
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**CONNECTICUT**—H. C. C. Miles, Milford.  
**FLORIDA**—O. C. Painter, Box 178, Jacksonville.  
**GEORGIA**—T. H. McHatten, Athens.  
**IDAHO**—Walter Wood, Boise.  
**ILLINOIS**—A. M. Augustine, Normal.  
**INDIANA**—M. W. Richards, Lafayette.  
**IOWA**—Wesley Greene, Des Moines.  
**KANSAS**—O. F. Whitney, N. Topeka.  
**KENTUCKY**—Prof. C. W. Mathews, Lexington, Ky.  
**MAINE**—E. L. White, Bowdoinham.  
**MARYLAND**—E. P. Cahill, Hancock.

## Indiana Horticultural Society

At the annual election of the Indiana State Horticultural Society, held November 13, at Tomlinson Hall, Indianapolis, where the fifth annual apple show had been in progress a week, all the old officers were re-elected. They are: President, William M. Walton, Jr., Laporte; vice-president, C. G. Woodbury, Lafayette; secretary-treasurer, M. W. Richards, Lafayette.

A vice-president was selected also from each of the thirteen districts, as follows: Dr. B. F. Mason, Oakland City; R. A. Simpson, Vincennes; F. J. Heacock, Salem; Emmett A. Quillen, Trafalgar; S. A. Hazlitt, Greencastle; E. Y. Teas, Centerville; J. J. Milhous, Valley Mills; J. E. Smith, Muncie; Frank Moffett, Carmel; James Troop, Purdue University; D. W. Erbaugh, Onward; J. C. Grosman, Fort Wayne; H. S. K. Bartholomew, Goshen.

Uncle Joe A. Burton of Mitchell, Ind., presided as "Czar" at the first banquet ever held by the Indiana Horticultural Society. The banquet was held on the stage at Tomlinson Hall because it was felt that the apple growers would not feel at home in a hotel.

The "Czar" fixed a limit of four minutes on every toast, and stood on a chair to direct his meeting. A feature of the banquet was a series of cartoon slides that were thrown on the screen for the enjoyment of the diners. Ed. Smith, Mason J. Niblack, Charles Baldwin, Frank Wallace, J. M. Zion, Maurice Richards, William Walton, Jr., C. M. Hobbs, and other officers and growers were cartooned. F. J. Snodgrass of the state entomologist's office did the pen work.

Practically all the men cartooned were called on for speeches in addition to Senator H. M. Dunlap of Savoy, Ill., U. T. Cox of Proctorsville, O.; W. F. Perrine, president of the Illinois Horticultural Society and C. E. Bassett of the Department of Agriculture, Washington.

E. Y. Teas, the only surviving member of the original Indiana State Horticultural Society, was presented with a big easy chair. Mr. Teas is more than 80 years old, but

**MASSACHUSETTS**—Horticultural Society—William P. Rich, Boston.  
**MASSACHUSETTS**—Fruit Growers' Association—F. Howard Brown, Marlboro.  
**MICHIGAN**—Robert A. Smythe, Benton Harbor.  
**MINNESOTA**—A. W. Latham, Minneapolis.  
**MISSOURI**—H. S. Wayman, Princeton.  
**MONTANA**—M. L. Dean, Missoula.  
**NEBRASKA**—J. R. Duncan, Lincoln.  
**NEW JERSEY**—Howard G. Taylor, Riverton.  
**NEW YORK**—State: E. C. Gillett, Penn Yan. Western New York: John Hall, Rochester.  
**NORTH CAROLINA**—Prof. W. N. Hutt, Raleigh.  
**NORTH DAKOTA**—C. A. Cumberg, Hankinson.  
**OHIO**—F. H. Ballou, Newark.  
**OREGON**—C. D. Winton, Portland.  
**PENINSULA**—Wesley Webb, Dover.  
**PENNSYLVANIA**—J. A. Runk, Huntingdon.  
**SOUTH DAKOTA**—Prof. N. E. Hansen, Brookings.  
**TENNESSEE**—R. G. Briggs, Knoxville.  
**TEXAS**—G. H. Blackmon, College Station.  
**UTAH**—W. H. Homer, Pleasant Grove.  
**VERMONT**—M. H. Cummings, Burlington.  
**VIRGINIA**—William Massey, Winchester.  
**WASHINGTON**—M. Horan, Wenatchee.  
**WEST VIRGINIA**—Corleton C. Pierce, Ronney.  
**WISCONSIN**—F. Craneheld, Madison.  
**WYOMING**—Prof. Aven Nelson, Laramie.

still retains his interest in everything pertaining to orchards and apple growing.

It is possible that an organization to be known as the Indiana Fruit Growers' Association will be formed. The Horticultural Society adopted a resolution indorsing the idea.

Probably the proudest man at the entire show was Dan W. Legore of Gosport. Legore has an eighteen-acre orchard and brought fifty-one boxes of apples to the show, including Winesaps, Rome Beauties and Jonathans. He took more first prizes with these fifty-one boxes of apples than any one exhibitor ever took before in any Indiana apple show. The grand sweepstakes prize for the best box of apples of any variety was won by a box of Winesaps entered by Legore. The prize is a \$350 sprayer. The same box of Winesaps that won the sweepstakes prize won the first prize in the Winesap class, and his fifty-box exhibit won the first prize for an exhibit of that size. The prizes aggregate about \$650.

T. A. Farrand of Eaton Rapids, Michigan, was judge of the commercial orchard class at the Indiana Apple Show. First prize was taken by Dan W. LaGore, Gosport, with the best display of 50 boxes of Winesaps. Second prize went to the Greencastle Orchard Company, Greencastle, with the best exhibit of Delicious; third prize to Troth Brothers, Orleans, on 50 boxes of Winesaps; fourth prize to Giles Robison, Greenwood, for the best exhibit of Grimes Golden, and fifth prize to the Heacock Fruit Company, Salem, for the best mixed assortment.

President Charles D. Park of the Oregon Board of Horticulture discussed horticultural laws of the state at the thirtieth annual meeting of the state horticultural society at Corvallis last month. President M. McDonald, of the Oregon Nursery Co., made an address on "Uniform Horticultural Laws." There was much discussion of efficiency in marketing fruit. On the programme was W. H. Paulhamus, president of the Growers' Council, Puyallup, Wash.

At the forty-seventh convention of fruit growers of California, in Visalia, November 18-20, Dr. W. W. Fitzgerald delivered an address on "Walnut Culture in the San Joaquin Valley." Dr. L. D. Batchelor spoke on "Walnut Varieties and Cultural Methods."

Just say you saw it in AMERICAN FRUITS.

Miss Mona Dunne, daughter of Gov. Edward F. Dunne, displayed her patriotism Nov. 9, when called upon to name the best new chrysanthemum at the greater Chicago flower festival at the Coliseum. The yellow seedling of the Eaton type which was finally selected she christened "Illinois" while some 8,000 visitors at the show looked on and sang "Illinois" with the assistance of a band of twenty-five pieces.

## Prof. Van Deman—The Man

Continued from Page 160

better still, there have been propagated from this tree many thousands of young ones, some of which are bearing fruit that sell at prices in the Northern fancy fruit stores, at almost fabulous prices. In time there will be enough grown to bring it within the limits of reasonable trade. Many other varieties have since been introduced by the seed and plant introduction section of the Department of Agriculture but this first effort opened the way.

## Noted Judge of Fruits

"The introduction of the choice dates of the old world was another of my plans that was carried through successfully. In 1890 rooted suckers of the best named varieties were secured from Algeria, Egypt and Arabia and planted in the most promising parts of Southern Arizona and California. They did not flourish in all the places where they were planted but in some of them they did and have been bearing for many years past. Young plants have been taken from them and later efforts by the Government officials have been equally successful and now there are several thousands of trees of the choicest dates in all the world growing and beginning to bear in Southern Arizona and California. The industry has already passed beyond the experimental stage.

"Other foreign introductions are the citron of commerce from Corsica, several varieties of the best grapes of Persia and coconuts from the Philippine Islands."

Since leaving the Government service Prof. Van Deman has been engaged in lecture work in the farmer's institutes in several states and before many horticultural societies in the United States and Canada.

He has also acted as sole judge of fruits at six of the great expositions, in the United States doing this work by a system of his that has made it possible to do it alone and make to awards on a basis of equity that has met with satisfaction to all. As judge of the national and state fruit shows, he has acted very often. He was extensively interested, also, in nut culture and conducted the development of important pecan groves in the South.

During the last twenty years Prof. Van Deman became very popular and his knowledge of horticulture was recognized by thousands of people who never had the pleasure of meeting him, but who read his logical advice on horticultural subjects through the leading horticultural papers in the United States. He devoted much time to literature and for the last twenty years had been associate editor of Green's Fruit Grower, he was for years on the staff of the Rural New-Yorker, associate of the Southern Fruit Grower and of Better Fruit. Some of his writings appeared in other publications.

When a useful man dies, we invariably ask the question, "Who will take his place?" Prof. Van Deman's place will be difficult to fill. He loved his work and made a wonderful success. When we think of his successful career, we think of Mrs. Stanley's definition of success:

"He has achieved success who has lived well, loved much, and laughed often; who has gained the respect of intelligent men, and the love of little children; who has filled his niche and accomplished his task; who has left the world better than he found it, whether by an improved poppy, a perfect poem, or a rescued soul; who has never lacked appreciation of earth's beauty, or failed to express it; who has always looked for the best in others, and given the best he had; whose life was an inspiration, whose memory is a benediction."

Truly, Prof. H. E. Van Deman, as I knew him, and you knew him, was a man whose life was an inspiration, and his memory is a benediction.

**I TREES**  
 Largest assortment in New England. Evergreens, deciduous trees, both common and rarer varieties. Sturdy, choice stock that can be depended upon. Send for catalog and special trade prices.

**The Bay State Nurseries**  
 North Abington, Mass.

**SHRUBS**  
 This New England soil and climate produces fine sturdy shrubs. Special trade prices. By the thousands, hardy Native and Hybrid Rhododendrons—transplanted and acclimated. Send your lists.



# The Pedigreed Fruit Tree Argument

Summarizing his argument in favor of pedigreed trees J. Moncrief, Winfield, Kansas, says:

Now in conclusion of the discussion regarding the pro and con of pedigreed trees, I want to call to your attention that the investigation of the potato and citrus fruits and the deciduous fruits, one and all, bear out each other and lead to the same conclusion and that the propagation of none of these are from seed, or by sexual propagation, or a chip out of the block itself.

We might have gone into a long line of other similar improvements in corn, cereals of all kinds, cotton and forestry trees grown from seed, but if it is true of plants grown from seed with that variation, which we must all know exists in reproduction from seed, how much more true and exact is it in the production of fruit trees where the work is done by budding and grafting, or a chip from the mother tree itself.

I do not know of another nursery growing deciduous fruits such as apple and peach by pedigreed methods, but I hope to see the day when the nursery business will be revolutionized and you planters will demand pedigreed trees. The time will not come until men go into nursery business for the love of the work, rather than drift in it for the dollars and cents they can make out of it.

Possibly many of you think from reading advertisements that the majority of the trees that you plant are grown by this selective plan. I do not think that I could exaggerate when I tell you that I believe 98%, if not more, of the apple and peach trees that are planted today, are planted not only from unknown parentage, but from trees that have been bred from, perhaps, the poorest types for thirty or forty years. For as long as people buy fruit trees from the cord wood measurement rather than from the efficient or pedigreed measurement, just so long you will say to the nurseryman, go ahead growing trees on the wrong principle.

Now the nurseryman has not made big money by these methods for he has sold his trees so cheaply that he did not profit. What you should do is to organize a tree testing club, just as the dairymen have organized the cow testing club at Abilene, Kan., and as they expect to eliminate the drone cows by the Babcock test, you can eliminate your drone trees by the pedigreed test.

## Good Business Advice

Nurserymen and fruit growers have common interests. The success of the former insures the best stock for orchard planting. The success of the latter insures added demand for that stock. At a recent meeting of fruit growers a placard read: "Are you for co-operation and success or competition and loss?"

Here is good practical advice recently given to Michigan fruitgrowers:

Wake up, man! Your cattle wouldn't pay any more than your trees do if you fed them only when you felt like it. Have a program for caring for your orchard, and you will win out.

No business succeeds without intelligent co-operation with like interests, and nowhere is co-operation more necessary than with the fruit grower.

You have heard that "the farmer cannot be organized." I tell you, "he can, and he must." Other communities are doing it; so can you. Get together. Buy your spraying material and your packages by the car load.

Get together and adopt a standard for your goods. Get a label for a distinction mark of some kind for your produce, and then send someone out to sell your stuff.

Keep away from the big, overgrown and overcrowded markets. Find your customers in the medium-sized places; then, ship your cars to these places.

Treat the people to such an honest pack that they will come back for more the next year.

It can be done; it is being done by others, and you should get into line. There are thousands of people who want good fruit, and who do not mind the prices.

## Tomato Possibilities

In the markets and probably by most persons tomatoes are classed as vegetables. But Webster's dictionary says the tomato is a solanaceous plant native of the tropics but everywhere cultivated for its fruit; and refers to its "large rounded or oblate fruit which is red or yellow when ripe."

## Remedies for "Damping Off"

Commercial sulphuric acid has been found by the United States Department of Agriculture to be an effective remedy for the loss of pine and spruce seedlings from "damping off." It is quite common for the soft tissues of these young seedlings to decay so rapidly soon after sprouting that they disappear sometimes before the nurseryman knows that there is anything the matter with them. So common indeed is loss from this source that many nurserymen import their seedling stock from Europe. This, however, is not only troublesome, but dangerous. The white pine blister rust has already been introduced into this country in this way and continued importations of seedlings are certain to result in the establishment in the United States of other foreign pests.

For this reason the Department attaches much importance to the recent investigations of possible disinfecting agents which will rid the soil of the parasitic fungi which cause "damping off". Of these agents the most satisfactory for commercial use in the majority of cases has been found to be sulphuric acid. Treatment with this acid not only reduces losses from "damping off" but increases germination. For particulars write to the Department.

A friend in the U. S. A. sends us copy of daily paper, the Dayton Daily News, which must be almost unique. The whole of this special issue is devoted to the promotion of a crusade to beautify the city, by gardens, window boxes, tree planting, etc., and description of the methods of planning, planting, etc. All the space thus filled is taken up by advertisements of the local nurserymen, showing they fully grasp the practical outcome of a movement of this kind. Why is not the cry of the "city beautiful" more often heard among us, with a nurseryman or two leading the agitation?—Horticultural Advertiser, London, Eng.

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